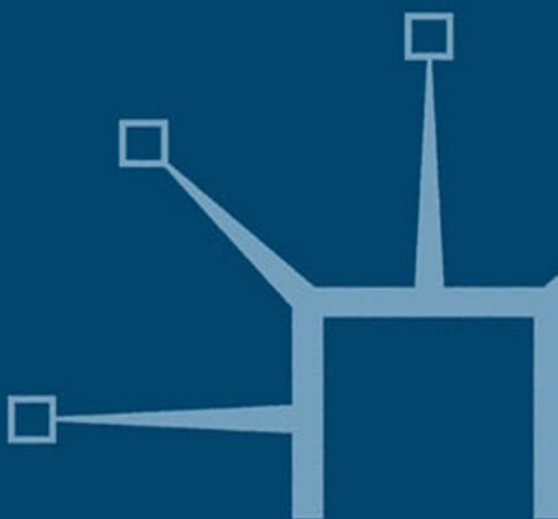


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Russell and the Philosophy of Language

Graham Stevens



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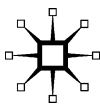
The Theory of Descriptions

Russell and the Philosophy of Language

Graham Stevens

University of Manchester, UK

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For Amy and George

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Introduction

Bertrand Russell's legacy in the philosophy of language is undeniable. No discussion of the development of the subject over the last century is complete without a significant part being devoted to Russell's contribution to it. Russell's contribution is wide-ranging, but there are two connected elements which stand out as being particularly responsible for guaranteeing Russell's lasting legacy: his account of singular propositional content, and his account of general propositional content. The latter account contains what is perhaps the most celebrated element of his philosophical output: his theory of definite descriptions. The paper which first presented his celebrated theory of definite descriptions (he had previously developed another, uncelebrated, one), 'On Denoting', was published in *Mind* in 1905 and may well be the most famous, and most read, philosophical article yet published.

The impact of the theory of descriptions on twentieth-century philosophy has been extraordinary. The theory is an analysis of the semantics of definite descriptions, that is, phrases formed by combining a nominal expression with the definite article 'the', such as 'the book', 'the table', 'the book on the table', 'the present Queen of England', 'the author of *The Principles of Mathematics*', and so on. Yet, in Russell's hands, it has been applied to areas well beyond the linguistic such as the foundations of mathematics, the theory of knowledge, and metaphysics. Its greatest impact, however, has been in the philosophy of language, where it still continues to be the subject of lively, controversial, and fruitful debate. The reason for this is that the theory goes to the very core of the concerns of the philosopher of language. The relationship of semantics to pragmatics, the relationship of syntax to semantics, the relevance of formal methods to the analysis of natural language, the extent to which semantic phenomena have a bearing on metaphysics,

epistemology, and psychology – all of these and more are very quickly brought into sharp relief by reflection on the theory of descriptions. The impact of the theory of descriptions – and of Russell's philosophy in general – on the philosophy of language is, therefore, unsurprising. What may come as more of a surprise to those new to the study of Russell is that, according to the overwhelming majority of Russell scholars, Russell was never primarily interested in the philosophy of language.

This interpretation is not an observation about Russell's philosophical project in general – an observation that could be consistent with the claim that the theory of descriptions is an exception to this general rule – but can be extended to the theory of descriptions itself. In the most recently published introduction to Russell's philosophy, for example, Gregory Landini writes that although the theory of descriptions has been 'appropriated to the ends of a theory of communication', in fact it is 'neither an endeavor to provide a theory of communication, nor a theory of what is before a speaker's mind in communication' (Landini, 2011: 194).¹ Landini's view here is not unusual. The theory of descriptions, we are frequently told, was not intended to provide an analysis of the semantics of definite descriptions as they occur in natural language; it was intended to provide a replacement for them. Russell, or so most interpreters of his work maintain, was not engaged in the philosophical study of language – because he held language to be inherently flawed and deceptive. As such, these interpreters maintain that Russell believed that natural language is best abandoned as a tool of philosophical inquiry and replaced by an idealized 'logically perfect' language. The formal language developed in *Principia Mathematica* is, on this interpretation, intended as a model for such a language.

We thus arrive at a striking disparity in the ways in which Russell's work has been received by its historical commentators and by the vast numbers of philosophers who have been, and continue to be, influenced (positively or negatively) by it. The situation is perhaps all the more striking because these two groups overlap to a considerable extent. Philosophers of language whose position on the subject has been shaped by Russell's work simultaneously write historical papers that assume the correctness of the interpretation of Russell just described.² Clearly, there is some truth in the interpretation. All the same, I believe that our uncritical acceptance of the interpretation has led to a misunderstanding of the nature of Russell's enterprise and its relation to the philosophy of language. A central aim of this book is to challenge the interpretation, which I believe oversimplifies Russell's attitude towards language and thereby overstates the gap between Russell's project understood

historically on the one hand, and the project that he instigated in the philosophy of language on the other. I hope, therefore, to go some way towards reconnecting these two spheres of Russell's influence, and to bring the historical and purely philosophical analyses of his work into closer alignment.

The aim of this book is to give an account of the theory of descriptions that is sensitive to the concerns of scholars of Russell's philosophy as well as contemporary philosophers of language. This goal sometimes demands that I consider detailed, and sometimes technical, data pertaining to both projects. Often both projects come together, in places where I address head on the gap that I perceive between purely historical and purely philosophical treatments of the theory of descriptions. At other times, I address issues which are primarily of concern for the historical understanding of the theory; at yet other times, I address issues which have no direct bearing on the history of the theory but are straightforward discussions of some key issues raised by the theory in the philosophy of language. Even in these discussions, however, it should be borne in mind that an indirect link to the historical material is preserved through the claim that the historical and philosophical are more closely linked than is commonly recognized. Only if I am right about this will many of the various defences and extensions of the theory that I offer in the book be justifiably defences and extensions of *Russell's* theory of descriptions.

From what I have said so far it should be obvious that some may find the interpretation of the theory of descriptions that I present in this book – and its place in Russell's philosophy and in analytical philosophy in general – to be controversial. All the same, I hope that the book is honest and self-aware enough about the delicate historical debates to provide a balanced introduction to the theory for those new to Russell's philosophy – one that does not give a distorted view of the current situation regarding the historical study of its subject.

Chapter 1 serves to give an outline of the theory and its reception by philosophers of language over the last century. I have decided to keep historical concerns largely absent from this chapter so as to concentrate on explaining the theory itself in as clear a way as possible. I then provide more historical balance in the following three chapters. Chapters 2 and 3 contextualize the theory of 'On Denoting' in relation to Russell's philosophical project of the period, examining Russell's shift from his earlier theory of denoting to the 1905 theory, and the various uses that he put the theory of descriptions to in the years immediately after he discovered it. The most notable use that Russell put the

theory of descriptions to in this period was his application of the notion of an 'incomplete symbol' to the symbols for classes, first in the little known 'substitutional theory of classes and relations', and later in the much better known, but still fiercely debated, theory of logical types in *Principia Mathematica*. When I wrote *The Russellian Origins of Analytical Philosophy* five years ago, this was the main focus of what I had to say about the theory of descriptions. I was then under the impression that the almost obsessive approach Russell took to the subject of denoting immediately prior to, and culminating in, the writing of 'On Denoting', was fully explained by these ingenious extensions of the theory to the foundations of mathematics. For a number of reasons, I now think that this was a mistake. Illuminating though these applications may be for explaining the value Russell came to attach to the theory, they do not adequately explain why Russell came to reject his 1903 theory of denoting and to look for an alternative, which he published in 1905. Nor is the explanation to be found, as many still insist, in any unwelcome ontological consequences of the 1903 theory of denoting. As I argue in detail in Chapter 2, the semantic theory implicit in the *Principles of Mathematics* is much more sophisticated than the orthodox interpretation of it suggests. Contrary to popular opinion, the 1903 theory of denoting does not carry any commitment to shadowy 'Meinongian' entities. Hence a desire to rid his ontology of such entities in 1905 cannot explain his shift from the 1903 to the 1905 theory. As a number of Russell scholars have recently concluded, the missing piece in the jigsaw here is the frustratingly cryptic 'Gray's Elegy Argument' contained in 'On Denoting'; manuscript evidence strongly suggests that this played a decisive role in Russell's shift from the 1903 to the 1905 theory. Chapter 3 examines this argument.

Having restored some historical balance to my account of the theory of descriptions in Chapters 2 and 3, I turn in Chapter 4 to tackle the question of how to relate the historical treatment of the theory and its reception by contemporary philosophers of language. I isolate the status of logical form as centrally important to this question. It is because of Russell's avowedly non-linguistic conception of logical form that most commentators take him to be embarked on a project which is fundamentally distinct from any project in natural language semantics. This is illustrated vividly by one of the few exchanges in print over the relation of historical and purely philosophical interpretations of the theory, conducted by Stephen Neale and Bernard Linsky. Linsky explicitly objects to Neale's attempt to assimilate Russell's theory of descriptions to recent work in natural language semantics on the grounds

that Russell's notion of logical form is intractable to linguistic analysis. I reject Linsky's position, arguing that although Russell certainly did have a non-linguistic conception of logical form, this was largely due to the poverty of syntactic theory available to him at the time. In light of the dramatic advances made in generative linguistics over the last half century, there is no obstacle to taking a linguistic view of logical form on Russell's behalf. Contrary to what Linsky argues, I claim that no harm is inflicted on the theory of descriptions by doing so and, furthermore, the shift is actually advantageous to the theory as it allows for a syntactic individuation of quantifier phrases, whereas Russell's own position must individuate quantifiers semantically. This position, I argue, undermines Russell's main argument against referential accounts of definite descriptions.

The shift in conception of logical form that I urge in Chapter 4 also has consequences for one of Russell's most prized results of the theory of descriptions, namely his notion of an 'incomplete symbol'. Russell thought that although sentences containing descriptions were meaningful, the descriptions themselves did not have meanings. I argue (contrary not only to Russell, but also Linsky *and* Neale) that this view should be jettisoned, and replaced by Neale's notion of 'object-independence' which, I argue, preserves all of the benefits to be had from Russell's doctrine of incomplete symbols while still allowing us to assign semantic values (generalized quantifiers) to quantifier phrases.

The reconnection of the history and philosophy of the theory of descriptions that I attempt in Chapter 4 is thus not without casualties for Russell's original theory. This might lead some historians of Russell's philosophy to suspect that I have been too hasty in trying to force together two approaches to the theory that turn out, after all, to be incompatible. However, insofar as I have rejected any of Russell's doctrines in this chapter, I reject them, not on the grounds that they are incompatible with a linguistic interpretation of the theory of descriptions, but on the grounds that they are *mistaken* linguistic doctrines of Russell's. The claim that definite descriptions are incomplete symbols, for example, is a semantic claim. By rejecting this claim I am urging a modification of Russell's position *qua* philosopher of language. This therefore supports my overall thesis that Russell was (intentionally) a philosopher of language, and that the widely presented conception of him as one for whom concerns about natural language were philosophically irrelevant is misleading.

Having presented the case for the interpretation of the theory of descriptions as first and foremost a theory of natural language syntax

and semantics, I turn my attention to some extensions of the theory that naturally suggest themselves as a consequence of this interpretation in the next two chapters. If Neale is correct (as I argue in Chapter 4) that descriptions are just a kind of quantifier, this raises the question of whether all determiner phrases (phrases formed by attaching a so-called 'determiner' to a nominal to form a complex noun phrase) are quantifiers, or whether some may be complex singular terms (i.e. referring expressions). Advances in the analysis of natural language quantifiers have facilitated a formal analysis of the majority of natural language determiner phrases as quantifier phrases, even those which are non-classical (in the sense that they cannot be defined by the classical first-order quantifiers). However, a fierce debate continues over the status of those determiner phrases which are formed by attaching a nominal to a demonstrative expression such as 'this' or 'that' to form so-called 'complex demonstratives' like 'this book' or 'that fox'. Chapter 5 examines the prospects for an extension of the theory of descriptions to provide a quantificational semantics for complex demonstratives. The extension of the theory I develop is far simpler from a semantic perspective than alternative proposals, although this semantic simplicity comes at the cost of increased pragmatic complexity. However, the pragmatic processes that I appeal to are, I argue, independently required by the theory of descriptions to account for uses of what are less controversially (and in some cases, wholly uncontroversially) deemed to be quantifier phrases.

Whereas Chapter 5 has little connection with the historical details of the theory (Russell himself never considered a quantificational – or attributive – interpretation of complex demonstratives to be plausible), Chapter 6 again brings together both historical and purely philosophical concerns. However, the historical interest of the chapter is only indirectly related to the theory of descriptions itself. In this chapter, I consider Russell's analyses of indexical expressions or 'egocentric particulars' as he often called them. The theory of descriptions must be combined with a theory of indexicality to be successful, most obviously because definite descriptions can themselves be indexical by virtue of indexical properties of the nominal expressions contained in them (e.g. 'the day after tomorrow' or 'the time of my life'). Furthermore, it has recently been noted that Russell's appeal to scope phenomena facilitated by the theory of descriptions to explain some propositional attitude ascriptions, leaves unanswered important semantic questions concerning the cognitive significance of the attitudes they ascribe. These questions will have to be answered by a general explanation of

the cognitive significance of singular propositions, including those expressed by indexical sentences. Numerous problems face the various proposed answers to these questions. In Chapter 6, I suggest that some advances can be made by looking again at Russell's largely neglected work on indexicality in his later philosophy. There is no question, it seems to me, that this episode in Russell's philosophical development was one in which he was particularly attuned to central problems in the philosophy of language – problems that many of his contemporary philosophers of language had ignored. Thus the extension of the theory of descriptions (i.e. via the theory of indexicality it must be paired with) that I sketch in the chapter neatly returns us to the question of Russell's position regarding the philosophy of language. It also, I hope, shows that Russell's often maligned later works have much more to offer than is commonly recognized.

Finally, in Chapter 7, I conclude the book by summarizing the interpretation of Russell as a philosopher of language that has emerged from the preceding chapters. It is important to stress that this interpretation in no way seeks to play down Russell's opposition to the suggestion, much more popular at the end of his career than it is now, that, as he put it 'it is not the world we are to try to understand but only sentences' (Russell, 1959: 161). Russell, quite rightly, ridiculed this 'curious suggestion' (ibid.). But that does not show that he was not interested in the philosophy of language. On the contrary, since the waning of ordinary language philosophy and of the influence of Wittgenstein, this view has no currency in the philosophy of language. The overwhelming majority of philosophers of language would agree wholeheartedly with Russell when he dismisses the idea that 'the world of language can be quite divorced from the world of fact' (ibid.). Indeed a very large number of them would follow Russell's own lead in positing a direct link between language and the world through the device of direct reference, a semantic device which many would follow Russell even further in characterising as grounded in purely causal relations. Russell may have shown nothing but exasperation in response to the dominant position in the philosophy of language in the fifties and sixties, but the subject has moved on rapidly since then. The concerns of philosophers of language now are very much in line with concerns at the heart of Russell's philosophy. The most vivid example of this is Russell's treatment of propositional content. Russell never identified propositions with their linguistic expressions. In his early philosophy, he believed they were objects containing the very things that they were about. In his later philosophy, he abandoned this view in favour of a conception of them as

psychological elements, literally in the heads of those who grasp them. This resolutely non-linguistic conception of propositional content is regularly offered as grounds for denying that Russell took language seriously as a subject of philosophical study. Yet, both conceptions of propositional content are currently defended within the philosophy of language. Indeed many philosophers of language take the analysis of propositions to be the central concern of their subject. Though the analysis he offered underwent dramatic alterations, the analysis of propositions was always at the core of Russell's philosophical project. Thus, ironically, the very feature of his philosophy that is widely cited as evidence of his lack of interest in the philosophy of language, turns out to locate the philosophy of language at the centre of Russell's philosophy.

1

The Theory

In this largely expository chapter, I will explain just what Russell's 'theory of descriptions' is. I will not be overly concerned at this stage with the wider details of Russell's philosophy that provide the context in which the theory was situated for him, nor will I be overly concerned with the context in which the theory was, and continues to be, situated for other philosophers. Both of those issues will be addressed in detail in subsequent chapters. My intention here is simply to state the essence of the theory, and to examine in detail some of its key features. For the purposes of this chapter, I will assume that the theory of descriptions is a theory of the semantics of certain natural language expressions. Whether Russell intended this is an issue to be dealt with later. Whether he intended it or not, any study of the theory which is to take seriously the philosophical discussions of it conducted over the last century must evaluate it as a component of a general enterprise in natural language semantics, whatever additional roles of the theory it also assesses.¹

1.1 Denoting phrases

The main insight of the theory of descriptions is that a group of phrases that Russell labels 'denoting phrases' are not, as assumed by many of Russell's predecessors,² singular terms. A singular term, for Russell, is a term that (at least with respect to a context)³ cannot fail to refer to a unique object. Russell eventually came to think that even proper names were not genuine singular terms but were, in fact, disguised definite descriptions. The doctrine that names are disguised descriptions, however, is additional to and independent of the theory of descriptions. It was not explicitly advocated in 'On Denoting'. Hence, for the purposes of explaining the theory of descriptions in this chapter, I will ignore

Russell's descriptivist theory of proper names and take proper names to be singular terms. Thus, 'Bertrand Russell', '*Principia Mathematica*', 'Manchester' and 'Manchester United' are all singular terms for our present purposes. Denoting phrases include definite descriptions, that is, phrases of the general form 'the *F*' (where '*F*' may be of varying degrees of complexity) such as 'the author of *Principia Mathematica*', 'The three-volume treatise on mathematical logic authored by Bertrand Russell and Alfred North Whitehead', 'the city in the North-West of England renowned for its role in the industrial revolution', and 'the football club that won the English Premiership, the FA Cup, and the Champion's League in the final year of the last millennium'. Denoting phrases, it is important to note, do not only include definite descriptions, however. Russell makes it plain in 'On Denoting' that the theory applies to several other kinds of phrases:

By a 'denoting phrase' I mean a phrase such as any one of the following: a man, some man, any man, every man, all men, the present King of England, the Present King of France, the centre of mass of the solar system at the first instant of the twentieth-century, the revolution of the earth round the sun, the revolution of the sun round the earth.

(Russell, 1905c: 41)⁴

Although it is notable that Russell gives several examples of definite descriptions here, and that he describes definite descriptions as 'by far the most interesting and difficult of denoting phrases' (ibid.: 44), this should not be taken to imply that he is unconcerned about the others. There are a number of reasons for citing specifically these five instances of definite descriptions: Russell wants to stress that denoting phrases may be of varying degrees of semantic complexity (including denoting phrases which contain denoting phrases as proper constituents), that they may contain indexical elements, that they may be phrases whose apparent denotations are drawn from varying ontological kinds (i.e. not just physical, or even abstract, objects but relations, events, and so forth), and that the existence or non-existence of the apparent denotation is irrelevant to the classification of the corresponding phrase as a denoting phrase. As Russell puts it, 'a phrase is denoting solely in virtue of its *form*' (ibid.). As Kaplan (2005: 969) notes, Russell's terminology here is apt to mislead the unwary reader who, familiar with more recent work in linguistics, would be forgiven for taking Russell's point to be a semantic one. Despite the semantic connotations

of the word 'denoting', however, Russell is stressing that his classification of phrases as 'denoting' is purely grammatical: when Russell calls a phrase 'denoting' he does not mean that it denotes anything. He simply means that it belongs to the class of phrases just given. This is indeed made plain in the next few sentences: 'We may distinguish three cases: (1) A phrase may be denoting, and yet not denote anything; e.g., "the present King of France". (2) A phrase may denote one definite object; e.g., "the present King of England" denotes a certain man. (3) A phrase may denote ambiguously; e.g., "a man" denotes not many men, but an ambiguous man' (Russell, 1905c: 41).

The classification of phrases as denoting phrases does not carry any assumption, then, regarding their semantics. This point is of the utmost importance, as we shall see. A large part of Russell's aim in 'On Denoting' is to expose the way in which philosophers had been misled by (surface) grammar, making uncritical assumptions regarding the semantics of these phrases on the basis of their grammatical properties. Russell's theory of descriptions, by contrast, urges a revision (or replacement) of, conventional grammatical theory in the light of more critical semantic reflection.

Once it is recognized that Russell's denoting phrases are classified purely grammatically, it is obvious that they are simply phrases numbered among (perhaps even exhausting⁵) the phrases many linguists now classify as 'determiner phrases'. A determiner phrase is a noun phrase constructed by combining a 'determiner' (Det for short) with the 'head' noun (N for short) of the construction so as to form a complex noun phrase (NP for short) as in the following examples:⁶

1. [_{NP}[_{Det} a][_N King]]
2. [_{NP}[_{Det} every][_N King]]
3. [_{NP}[_{Det} some][_N Kings]]
4. [_{NP}[_{Det} the][_N King]]
5. [_{NP}[_{Det} my][_N King]]
6. [_{NP}[_{Det} England's][_N King]]
7. [_{NP}[_{Det} the][_N King of England]]
8. [_{NP}[_{Det} few][_N Kings]]
9. [_{NP}[_{Det} that][_N King]]

In the above, (1) – (4) are all cases of NPs that Russell classifies as denoting phrases. Although NPs of the form of (5) are not listed in the opening paragraph of 'On Denoting', Russell makes it plain later in the essay that he numbers them also among denoting phrases. The example

Russell (1905c: 47) gives, 'my only son', might suggest that only a limited number of possessive NPs are considered denoting phrases, namely those that have a condition of uniqueness built in. However, as the voluminous literature on 'the problem of uniqueness' allegedly faced by the theory (the problem of accounting for uses of 'the F' where there is more than one F) testifies, the problem is a more general one for the theory of descriptions and so shouldn't have led Russell to distinguish possessive NPs in this way.

The inclusion of possessive NPs in the class of denoting phrases is, again, independent of the theory of descriptions. Russell simply takes possessive phrases to be synonymous with denoting phrases and, hence, susceptible to the same analysis as them, whatever that may be. The assimilation is indeed natural from the point of view of one who construes logical form, as Russell did, as capable of being captured by something along the lines of predicate logic. This is clearer if we consider genitive NPs like (6), which can be paraphrased in first-order logic with a description operator, as ' $\iota x(Kx\epsilon)$ ', which can be read 'the x such that x is King of England'. In other words, it is quite harmless to interpret the logical form of (6) as that of its semantic equivalent (7). The situation may seem more complicated for (5), purely as a result of the presence of the possessive form of the first-person pronoun, but the complication is one that can be overcome readily enough by combining the theory of descriptions with adequate theories of indexicality and anaphora, as Neale (1990) has shown in convincing detail.⁷

Notice that the occurrence of a proper name in its genitive inflection in examples like (6), and also the genitive inflection of the personal pronoun in (5), are not obstacles to treating (5) and (6) as definite descriptions at the level of logical form. There are important differences between proper names and definite descriptions that we will discuss later, but they do not prohibit the formation of genuine definite descriptions containing proper names as semantically empowered constituents, such as 'the father of Bertrand Russell'. The proper name is here a proper constituent of the description; hence the phrase as a whole is a denoting phrase. The fact that this becomes explicit once we convert phrases like (6) into the form of (7) speaks in favour of including (5) and (6) among denoting phrases. There is, as we shall see when we look at the analysis of genitive NPs provided by the theory of descriptions in the next section, no conflation of names and descriptions entailed by permitting descriptions that contain proper names as proper constituents.

Again, (8) and (9) might be thought of as being well removed from the list of denoting phrases. However, it is not clear that this is so. Russell

makes it quite clear that he numbers what are traditionally construed as quantifier phrases among denoting phrases; hence there is no obstacle to treating (8) as a *denoting phrase* insofar as it is clearly a quantifier phrase. Whether or not the analysis of denoting phrases that Russell's theory offers successfully extends to this quantifier phrase will be contingent on the success of an extension of quantification theory generally to such non-classical quantifiers. We will return to this point frequently in this book, most notably in Chapters 2, 4, and 5. The case of (9) is more controversial, as the consensus view has it that 'complex demonstratives', as such phrases are called, are not quantifier phrases at all, but singular terms whose function is to directly refer to objects. However, there are grounds for challenging this view and, hence, for seeking to extend the theory of descriptions to encompass phrases like (9), thereby effectively bringing all determiner phrases within the range of the theory. The prospects for a quantificational analysis of (9) are explored in Chapter 5.

Before turning to the details of Russell's analysis of denoting phrases, it is worth examining the class of expressions that he distinguishes them from, namely, the singular terms. As with denoting phrases, Russell's classification of these expressions may be in terms of their grammatical properties in the first instance, but the analysis that he urges is the result of semantic considerations, albeit under the influence of epistemological motivations that we will explore in more detail in later chapters.

1.2 Singular terms

To fully appreciate Russell's conception of singular terms, it is helpful to place it in the context of his conception of singular propositions. Russellian propositions are complexes composed of the entities they are about. It is common now to employ the notation of ordered sequences to represent these entities. Thus the proposition expressed by the singular sentence 'Russell is wise', is modelled by the ordered pair $\langle\langle\text{wisdom}\rangle, \text{Russell}\rangle$. And, in general, the proposition expressed by a sentence of the form ' $F(a_1, \dots, a_n)$ ' is modelled by a sequence of the form $\langle\langle F \rangle, \langle a_1, \dots, a_n \rangle\rangle$. There is, as Schiffer (2003)⁸ notes, some danger in reading too much into this symbolism. Many of the issues that vexed Russell, for example that of what the unity of a propositional complex consists in, are presumed but left unexplained by the assimilation of propositions to sequences.⁹ Nonetheless, as our concern in this chapter is with the theory of descriptions in the abstract rather than with its

precise situation in the details of Russell's philosophy, I will adopt the notation here, for the sake of convenience, saving consideration of to what extent it reveals or disguises Russell's true intentions for later in this book.

It is now common for these Russellian propositions to be called 'singular propositions'. It is important to divert a potential confusion in adopting this term. Russell himself extended this conception of propositions to general ones as well as singular ones. It would thus be mistaken to take Russell to be denying, in 1905, that general propositions contain the things they are about. Furthermore the mistake would lead to a serious misunderstanding of the theory of descriptions, for, as we shall see, the theory retains the view that sentences containing denoting phrases express propositions which contain the things that they are about. It denies, however, that they express singular propositions. The theory allows these two claims to be asserted without incompatibility by denying that sentences containing denoting phrases in subject position are about the things these phrases purport to denote. I will thus retain the term 'Russellian proposition' as having a somewhat wider extension than 'singular proposition': the set of singular propositions is a proper subset of the set of Russellian propositions, the remaining elements of the latter being general propositions.

The key point to note about this conception of propositional content is simply that singular sentences express propositions containing the things they are about. The semantic contribution made by a singular term is therefore an object – the thing it stands for. Unlike rival semantic theories, such as Frege's, according to which a singular term refers to its bearer under a 'mode of presentation', Russell's semantic theory denies that there is any intermediary sense or connotation between a singular term and its referent.

Russell was clearly motivated to a large extent by epistemological considerations here, and those considerations do not always seem to be at home in a semantic theory. Russell's central epistemological motivation was his insistence on the close relationship between understanding and acquaintance. To understand a proposition, according to Russell, one has to stand in a special epistemic relation – that of *acquaintance* – to the thing that proposition is about. Thus, in order to understand the singular proposition $\langle\langle F \rangle, a \rangle$, one has to be acquainted with a . The claim is enunciated on several occasions, in varying forms, and it plays a significant justificatory role in 'On Denoting' where it occurs at the beginning of the essay: 'All thinking has to start from acquaintance' (Russell, 1905c: 42) and, again, at the end, where the preservation of the principle

by the theory of descriptions is presented as a commendation of the theory: 'Thus in every proposition that we can apprehend (i.e. not only those whose truth or falsehood we can judge of, but in all that we can think about), all the constituents are really entities with which we have immediate acquaintance' (ibid.: 56). When one is not acquainted with *a*, the singular proposition $\langle\langle F \rangle, a \rangle$ is inaccessible and the only way to think about *a* is by description. If *a* uniquely satisfies the definite description 'the *G*', for example, one may think of *a* under this description, entertaining the proposition that the *G* is *F*. We will see in the next section how this is effected by the theory of descriptions.

Despite the importance Russell attached to the notion of acquaintance, the principle as just stated is seldom argued for. Russell takes it for granted that one cannot think directly about an object without being linked to that object by acquaintance. Once that assumption is made, it is reasonable enough to adopt the Russellian view of singular terms (at least until one encounters the difficulties these notions bring): For any sentence *S* about an object *o*, containing the singular term *a* (which denotes *o*), one understands *S* by virtue of a direct connection between oneself and *o*. Thus, Russell concludes, *o* itself is the semantic contribution of *a* to the content of *S*. It follows, of course, that *a* must succeed in contributing *o* to *S* if *S* is to be understood. In other words, genuine singular terms cannot fail to refer: there is no room for genuinely empty names in Russell's semantics. For this reason, Russell was led to distinguish *logically* proper names from ordinary proper names, holding the latter to be disguised definite descriptions, while the former were guaranteed to refer.

The doctrine that ordinary proper names are disguised or truncated descriptions, along with associated doctrines often hinted at (or perhaps even conflated with the first view) by Russell, such as the view that the reference of a proper name is fixed by a definite description, is widely acknowledged to have been refuted by Saul Kripke's influential (1980) attack on descriptivism. This should not be taken to pose a serious problem for the theory of descriptions however, which is wholly independent of the description theory of names. The theory of descriptions is a theory of the logical form of quantifiers in general and of descriptions in particular. The doctrine that names are disguised definite descriptions is an additional doctrine that can be rejected by the defender of the theory of descriptions or endorsed by defenders of distinct accounts of the logical form of descriptions (as is evidenced by the fact, discussed in the next chapter, that Russell endorsed the description theory of names in 1903, before he had arrived at the theory of descriptions).¹⁰

The principle of acquaintance leads quite naturally to a Russellian conception of singular terms. However, it does not provide sufficient motivation for a Russellian conception of propositions, nor, I think, did Russell suppose that it did. As Neale (1990, especially ch. 1) is eager to stress, all that the acquaintance requirement ensures is what he terms the 'object dependency' of singular thought: if our ability to understand *S* depends on our being acquainted with *o*, then our understanding of *S* depends on the existence of *o*. Without *o*, there could be no understanding of, or expression of, the proposition now expressed by *S*. The proposition expressed by *S* is thus an object-dependent proposition, but this does not make it a singular proposition. The thesis that propositions depend on the existence of the objects they are about is independent of the thesis that they contain them as constituents.

A Russellian conception of singular terms need not be arrived at from anything quite as restrictive as Russell's principle of acquaintance. Evans (1982) softens the principle, extracting from it a weaker (and more plausible) constraint on thought: one must have *discriminatory* knowledge of what one is thinking about. Such a principle ('Russell's principle' as Evans calls it) is indeed stated by Russell in a way that appears to be independent of the principle of acquaintance:

It is not possible for a subject to think about (e.g. have a belief about, make a judgement about) something unless he knows which particular individual he is thinking about.

(Russell, 1911: 159)

Some care is needed here, as Evans realizes: the principle that one can only think of *o* if one knows *which thing* *o* is, would be an overly restrictive version of Russell's principle if 'knows which' is interpreted literally. I can see an object *o*, dimly, in the dark and think 'that looks like a horse' without actually knowing whether *o* is a horse, a cow, a trick of the light, or whatever. I can even have a thought about myself without knowing that I am the particular individual my thought is about, for example, when I have the thought that 'that man has forgotten to wear his trousers!' and do not realize that the unfortunate person whom I think I can see through a window is, in fact, myself seen reflected in a mirrored window. In each case, I can have a singular thought without knowing which particular item my thought is about. Nonetheless, in the weaker sense of *knowing which* that Evans intends, I do have some discriminatory knowledge of *o* and of myself: I can and do distinguish

o from other objects in its vicinity, and I distinguish myself from other individuals and objects in my visual field in the second example.

Once Russell's principle has been revised and repackaged as a requirement of discriminatory knowledge, rather than acquaintance, it can be wrested to some extent from Russell's own epistemology. Russell's epistemology drove him to conclude that one can only be truly acquainted with sense-data. These data were construed as private (though not mental)¹¹ objects. Thus the same singular thought can never be grasped by more than one distinct individual. Thoughts about the physical world, other minds, and all else besides one's own sense-data, conform to the principle that one can think something only if one knows what one is thinking about by relying on knowledge by description. But subscription to Russell's principle does not oblige us to adopt the same epistemology, and most now would prefer to follow Evans in admitting the possibility of singular thoughts about the denizens of the physical world and, most importantly, allowing the objects we have singular thoughts about to be publicly accessible.

The objects I can have singular thoughts about on this version of Russell's principle need not even be, or have previously been, immediately present perceptually, in the sense that they occupy, or have occupied, a region of space in the vicinity of that occupied by myself. I can think directly about an individual with whom my only contact occurs over the telephone. If my only contact with John Johnson has been by telephone, I can still *understand* the proposition <<tallness>, John Johnson>, and even think that John Johnson is tall (perhaps he has told me this, and I believe him). Insisting that my knowledge of John Johnson is really knowledge by acquaintance, consisting in my knowledge of something uniquely answering to a description like 'the person I spoke to on the telephone at time *t*', 'the person whose voice sounds like *x*', or 'the person named "John Johnson"', would just be to insist on retaining a Russellian epistemological perspective on the issue. One might be tempted to think that Russell's principle of acquaintance should be modified to allow us to have acquaintance with physical objects, rather than sense-data, out of a commitment to direct realism in the philosophy of perception. If the principle were modified on such grounds, one could question whether John Johnson is really one of the objects I can have discriminatory knowledge of on the grounds that, when talking to him over the telephone, I do not actually *perceive* Johnson. But that would be to cling to a principle of acquaintance, albeit in revised form. Once we replace the requirement that we have acquaintance with an object in order to think directly about it with the weakened version, the restriction it places on understanding

and thought should be freed wholly from the constraints of perception – even if perception remained the paradigm source of discriminatory knowledge. After all, if singular thoughts can be about abstract objects, perception of those objects as the source of discriminatory knowledge of them is surely an unreasonable expectation.

The Russellian conception of singular terms is not only independent of the principle of acquaintance, but also independent even of the principle that singular thought requires discriminatory knowledge. This is because one can arrive at the notion of a Russellian singular term by directly considering the semantics of certain expressions without being drawn on the issue, central to Evans's project, of what it is to think about something. Kaplan (1989a: 483–484) notes that direct reference theory (as this semantic theory of singular reference is usually termed) has its origins in semantic theorizing about artificial languages. Within this sphere, direct reference is not unusual: the semantic evaluation of a formula containing a free variable proceeds by assigning an individual from the domain over which the variable ranges to the variable. But, as Kaplan says, there is nothing more to the content of a variable than that individual: 'A variable's first and only meaning is its value' (ibid.: 484). The question of whether such a semantic picture had application in any region of natural language was raised, Kaplan reports, by Donnellan's (1966) work on referential uses of definite descriptions (which we will look at in more detail later in this chapter), as well as Putnam's (1975) arguments for semantic externalism, and Kripke's *Naming and Necessity*. Kaplan's own route into a distinctively Russellian semantic theory goes via a treatment of demonstratives. Demonstratives and 'pure' indexicals (i.e. indexical expressions like 'I', 'today', 'now', etc., that require no accompanying demonstration to fix their reference) are certainly prime candidates for directly referential natural language terms. Indexicals do have a literal meaning (what Kaplan calls 'character'),¹² that can be paraphrased independently of context. For example, the literal meaning of 'I' is something like 'the agent of this utterance'. But it is not this meaning that is contributed to the proposition expressed by an utterance of an indexical sentence. Rather the literal meaning is a rule governing the contribution that context makes to determining what proposition is expressed by the sentence. What is actually contributed to a proposition by an indexical is the thing it stands for in that context. This is clearly evidenced by the fact that the proposition expressed by an indexical sentence changes from context to context. When Russell utters the sentence 'I am hungry' he expresses the proposition <<hunger>, Russell>; when Frege utters the same sentence, he expresses

the proposition $\langle\langle\text{hunger}\rangle, \text{Frege}\rangle$. Yet the literal meaning of 'I' remains the same. In terms of content, then, there seems to be nothing more to an indexical than its referent. Objectors to singular propositions will of course be quick to point out that this does not demonstrate that propositions are Russellian. But the important point is that indexical singular terms are directly referential. The propositions expressed by indexical sentences (in contexts) are certainly object dependent: there can be no proposition expressed by the sentence 'I am hungry' unless there is an agent of the utterance who is the object on which it depends.¹³ Thus we have a clear argument for the existence of Russellian singular terms that is wholly independent of Russell's epistemology.

An important objection looms here: is it not the case that a proposition can be expressed by an indexical sentence containing 'empty' demonstratives? The kind of case I have in mind is something like this: pointing to a picture of Pegasus, I say 'that does not exist'. In this case, if the semantic machinery we are employing works correctly: the entity assigned to the demonstrative term 'that' ought, *prime facie*, to be Pegasus. But Pegasus does not exist, so haven't we encountered a violation of the governing principle of Russellian singular reference, namely that singular terms cannot fail to refer? It is tempting to respond to this by suggesting that a certain amount of linguistic figuration is at work here. The demonstrative reference may be construed as case of 'deferred reference' – the pragmatic phenomenon whereby reference to an object *o* is effected by employing, in the right kind of context, a term which does not literally refer to *o*, or which does not include *o* in its extension. The literature on pragmatics abounds with discussions of such cases.¹⁴ A waitress may report that 'the hamburger on table 13 left without paying'; or she may say of a large-nosed customer, 'Pinocchio is still waiting for his coffee'. One way to respond to this phenomenon is to take the literal expressions as elliptical for the propositions actually intended. So, for example, the waitress *meant* that the person who ordered a hamburger on table 13 left without paying, or that the person who has a big nose like Pinocchio's is still waiting for his coffee. Deferred reference may easily extend to demonstrative reference: 'that hamburger is still waiting for his coffee' (accompanied by a demonstration) may be used to refer to the hamburger-eater on table 13, for example. In such cases, the unpacking of the ellipsis will make it clear that the intended referent of 'that hamburger' was a contextually salient hamburger-eater, not a contextually salient hamburger. Applying the same case to the apparent reference to Pegasus, it might be argued that the 'that' in 'that does not exist' is not a reference to Pegasus after all. Unpacking the ellipsis

reveals that it is the very real picture of Pegasus that is being referred to: 'that is a picture of something that does not exist'.

Whatever one thinks of this response to the objection, it is unlikely that it will fend off the complaint for long. For one thing, it is easy to imagine other cases that will not be so easily dismissed. If, when I think I am alone, I hear a voice saying 'hello', and reply 'who said that?', my utterance of 'that' refers to the utterance I have just heard. But, if it turns out to have been trick of my mind and no utterance of 'hello' actually occurred at all, there does not seem to be a readily available stand-in that I referred to by deferral. It might be argued of course that I referred to some mental item of mine, but this would be wholly unintentional on my part, and therefore far removed from the cases of deferred utterance we have just discussed. Furthermore, seeking to repel the objection with regard to demonstrative reference is only to delay the inevitable. I mentioned above that Russell believed proper names were not Russellian singular terms, but definite descriptions. For the well documented reasons mentioned above, however, it is now widely accepted that ordinary proper names are not reducible to definite descriptions. The problem of how to reconcile apparently empty names with the thesis that singular terms are Russellian was one of the main motivations for Russell's description theory of names. With the collapse of that theory, the problem re-emerges, along with other connected ones: Frege's puzzle of how identity statements can be informative, as well as problems arising when substitutions are made into *de dicto* belief contexts, are outstanding problems for direct reference theories of singular terms. As things stand, if one accepts the unmodified Russellian story regarding singular reference then one seems forced to deny that sentences containing empty names can express complete singular propositions. If 'a' is an empty name, then there is nothing for the property F to be paired with as the thing expressed by 'Fa'. Perhaps the most obvious response is to deny that 'Fa' expresses a proposition, and hence to deny that it has a truth-value. But, as objectors are quick to point out, this is clearly unsatisfactory. Sentences like 'Gollum was one of Tolkien's finest creations' can certainly be used to *say* something, and arguably they can be used to say something true or false. And the negative existential 'Gollum does not exist' is certainly true, and true because there is no actual entity named by 'Gollum'. As the topic of this work is Russell's theory of general propositions, not singular ones, this pressing problem for the semantic analysis of proper names cannot be pursued further here.¹⁵ For the remainder of this chapter, I will now turn to address in detail the Russellian analysis of non-singular terms.

1.3 The theory of descriptions

By denying that a denoting phrase, DP, is a Russellian singular term, Russell denies that any sentence containing that phrase, which we can symbolize as 'F(DP)', expresses a proposition of the same structure as itself. If DP does not refer, there can be no entity corresponding to it present in the proposition expressed by F(DP). It is sometimes said that the theory of descriptions reduces all denoting phrases to quantifiers, but this claim has to be handled carefully. If quantifiers are assumed to stand for entities of one sort or another, such as Fregean higher-order functions (functions from first-order functions to truth-values), in the same sense that proper names stand for their bearers, then many would argue that one would be missing a crucial element of the theory by identifying denoting phrases with them, as this would fail to preserve the sharp distinction between denoting phrases and singular terms.¹⁶ Similarly, it would be controversial to take denoting phrases to be devices for referring to complex entities containing such functions. The theory of descriptions urges a more radical thesis than either of these claims: denoting phrases do not refer in any way whatsoever. The thesis that definite descriptions are quantifiers is true, for Russell, only with the added qualification that *all* quantifiers are non-referring expressions – a claim which, as we have seen, is central to the general theory of descriptions.

To substantiate this thesis, Russell offers a series of contextual definitions, providing for every instance of F(DP), an account of its structure – its logical form – from which DP is entirely absent. Despite the cautionary note just issued regarding the dangers of identifying DP with a quantifier or quantifier complex, it is nonetheless essential to the theory that F(DP) is analyzed as expressing a quantified (rather than singular) proposition. As Russell takes the universal quantifier as primitive in 'On Denoting' (and *Principia Mathematica*), defining instances of F(DP) as universally quantified propositions, it is easiest to begin with 'G(All Fs)' which is understood as the simplest case. Following Frege, Russell gives the following analysis:

$$(10) \text{ G(All Fs) } = \forall x(Fx \supset Gx) \quad \text{Df.}$$

'G(No Fs)' can be dealt with thus:

$$(11) \text{ G(No Fs) } = \forall x(Fx \supset \sim Gx) \quad \text{Df.}$$

Again, following Frege, the convenience of a separate existential quantifier, need not be relied on, as the logical form of the proposition

expressed by a sentence of the form 'G(Some Fs)' can be represented universally as follows:

$$(12) G(\text{Some } Fx) = \sim \forall x \sim (Fx \supset Gx) \quad \text{Df.}$$

Armed with this analysis, Russell is now content (contrary to his position on the chapter on denoting in *The Principles of Mathematics*) to dismiss any apparent differences between either 'G(Some Fs)' and 'G(An F)', or 'G(All Fs)' and 'G(Every F)' as 'psychological'. Thus the only determiner phrase remaining is 'The F'. This is the most famous component of the theory. Russell effectively analyses sentences containing definite descriptions in subject position as quantified conjunctions. For example 'G(The F)' will consist of three parts, the first asserting the existence of an F, the second asserting the uniqueness of this F, and the third asserting the G-ness of this F:

$$(13) G(\text{The } F) = \sim \forall x \sim ((Fx \ \& \ \forall y (Fy \supset y = x)) \ \& \ Gx) \quad \text{Df.}$$

This formula can be simplified to some extent by first defining an existential quantifier ('Some Fs'), as follows:

$$(14) \exists x Fx = \sim \forall x \sim Fx \quad \text{Df.}$$

and then employing this to obtain:

$$(15) \exists x ((Fx \ \& \ \forall y (Fy \supset y = x)) \ \& \ Gx)$$

If one craves even more simplicity, one can also resort to the following logical equivalent of (15):

$$(16) \exists x \forall y ((Fy \equiv x = y) \ \& \ Gx)$$

Similar instances of notational economy can be achieved by converting (12) into the logically equivalent:

$$(17) \exists x (Fx \ \& \ Gx)$$

And, while (18) is no more economical than (11), it may lend itself as a more natural paraphrase of it:

$$(18) \sim \exists x (Fx \ \& \ Gx)$$

Caution is once again to be commended in utilizing some of these abbreviations. In particular, although (15) is more revealing of the logical form attributed by the theory of descriptions to 'G(The F)' than is (13), it is arguable that (15) is also more revealing in this respect than its more succinct equivalent (16). Of course, Russell would correctly insist that such distinctions are merely psychological observations – indeed (15) may be a more perspicuous representation of a logical form than (16), but they are representations of one and the same logical form nonetheless, and the logical forms of Russellian propositions are independent of the accidents of our equivalent representations of them. However, perspicuity, even if it is merely in the mind, can be helpful in representing important logical features of propositions central to the theory such as scope interactions between quantifiers and other logical constants, as we shall see shortly. Of course, there may be instances where abbreviation plays an important practical role – simplifying proofs in mathematical logic where possible, for example – but it is important not to let the admissible abbreviations of the various analyses of the instances of F(DP) disguise the fact that the theory of descriptions is attributing a complex logical form to those instances that is concealed by their grammatical form.

Evidently, the apparent entities seemingly corresponding to denoting phrases according to the grammatical forms of sentences in which they figure, do not feature in the logical forms of those sentences on the theory of descriptions. Thus, on the theory, denoting phrases form a class of expressions wholly distinct from the class of Russellian singular terms. Just as the Russellian notion of a singular term is independent of the Russellian notion of a singular proposition, so too the account of general propositions that results from the theory of descriptions need not be characterized, as it is for Russell, in terms of those propositions not containing *constituents* corresponding to denoting phrases. It is quite compatible with the theory of descriptions to alternatively follow Neale (1990) once more, and simply classify general propositions as 'object independent': a general sentence F(DP) (assuming it does not contain an occurrence of a Russellian singular term among the expressions of the sentence other than DP) does not require the existence of *any* object in order to express a proposition.

1.4 Scope

Scope distinctions arise with regard to any logical operator, as any student of elementary logic quickly learns. Often, they are truth-functionally

inert. For example, an utterance of the English sentence ‘Peter and Frank and John went shopping’ is ambiguous as to whether the first or second occurrence of ‘and’ takes widest scope: we may have either

$$(19) p \ \& \ (f \ \& \ j)$$

or

$$(20) (p \ \& \ f) \ \& \ j$$

In (19) the first occurrence of ‘&’ has widest scope; in (20) the second occurrence does. Nothing of truth-functional significance hangs on the choice, however, as (19) and (20) are material equivalents.

Once quantifiers are introduced, scope becomes more important. This is not only the case for scope interactions between definite descriptions and other quantifiers and for occurrences of quantifiers in intensional contexts. There is an apparent ambiguity to sentence (21) below, although one reading (22) is more likely than the other (23):

(21) Every detective interviewed a suspect

$$(22) \forall x \exists y (Dx \supset (Sy \ \& \ Ixy))$$

$$(23) \exists y \forall x (Sy \ \& \ (Dx \supset Ixy))$$

Similarly, Russell’s famous example – see (24) below – of scope interaction between descriptions and negation, does not need to occur in an intensional setting to impact on truth-conditions (I here introduce ‘ $\exists_1 x (\dots x)$ ’, as shorthand for the complex quantifier ‘ $\exists x \forall y (\dots y \equiv x = y)$ ’ as defined in (15) and (16) above; I will use this shorthand on occasion for the sake of clarity in what follows):¹⁷

(24) The present king of France is not bald

$$(25) \exists_1 x (Kx \ \& \ \sim Bx)$$

$$(26) \sim \exists_1 x (Kx \ \& \ Bx)$$

The difference in truth-conditions is of central importance to Russell’s theory, as (26), but not (25), can be true when there is no present king of France.¹⁸ Additionally, scope interactions between descriptions and other quantifiers are extremely important in understanding anaphoric reference. As Neale (1990: 120) points out, definite descriptions may contain variables bound by a higher quantifier, and thus must take narrow scope with respect to the pronouns bound by the higher quantifier. Consider this (slightly modified) example of Neale’s:

(27) The mother of every girl waved to her

The correct representation here must give the quantifier phrase ‘every girl’ wide scope over the description in which it is, grammatically, a constituent part:

$$(28) \forall y(Gx \supset \exists_1 x (Mxy \ \& \ Wxy)).$$

These cases should be sufficient to demonstrate that scope is not just of concern when considering definite descriptions or when considering only intensional contexts. Nonetheless, there is no question that scope distinctions are of central importance when descriptions and other quantifier phrases do occur in intensional contexts.

Scope distinctions are appealed to by Russell in order to capture and define the *de re/de dicto* distinction. Consider Quine’s famous (1956) example:

(29) Ralph believes that someone is a spy

The *de re* reading of (29) is given by (30) below; the *de dicto* reading is given by (31):

(30) $\exists x$ (Ralph believes that x is a spy)

(31) Ralph believes that $\exists x$ (x is a spy)

The ability to sharply distinguish these just by appeal to scope interactions between the quantifiers and intensional operators allows Russell to disambiguate numerous sentences that resist such treatment if denoting phrases are treated as singular referring terms, including many of the puzzles concerning definite descriptions driving the discussion in ‘On Denoting’. The distinction is brought out clearly by the following example:

I have heard of a touchy owner of a yacht to whom a guest, on first seeing it, remarked, ‘I thought your yacht was larger than it is’; and the owner replied, ‘No, my yacht is not larger than it is’. What the guest meant was, ‘The size that I thought your yacht was is greater than the size your yacht is’; the meaning attributed to him is, ‘I thought the size of your yacht was greater than the size of your yacht.’

(Russell, 1905c: 52)

The guest’s actual meaning gives wide scope to the description ‘the size that I thought your yacht was’; the meaning attributed to him gives wide

scope to the intentional operator 'thought that' (Russell sometimes calls wide scope occurrences 'primary occurrences' and narrow scope occurrences 'secondary occurrences'). Thus the guest meant the *de re* interpretation, and the yacht owner attributed to him the *de dicto* reading.

Obviously the scope distinctions required to disambiguate these sentences are unavailable if denoting phrases are singular terms. If the definite descriptions of our language were singular terms (which I will represent by symbols of the form '[the F]_{SING}' in what follows), they would simply lack the complexity required to interact adequately with other logical and non-logical operators in the way that quantifiers can. Thus some other explanation of the *de re/de dicto* distinction for descriptive cases would be needed. In *Principia*, Russell and Whitehead need a means of representing scope, as they retain definite description symbols as defined symbols in the language for the sake of notational convenience. Their symbol, '(ix)(ϕx)' will be ambiguous, they think, without some indication of scope. Their reasons for thinking this can be gleaned from some reflection on the following attempted renditions of (32):

(32) The present king of France is not bald

(33) $\sim B(ix)(Kx)$

(34) $\sim B[\text{the } K]_{\text{SING}}$

If the descriptions in (33) and (34) are treated as syntactically simple, both remain ambiguous. Thus some way of representing the scope interactions enabled by the semantic complexity of sentences containing '(ix)(Kx)' (according to the theory of descriptions) is called for. Russell adopts a slightly awkward, but effective, convention of writing out the descriptive phrase ahead of each formula that it features in, placing it in square brackets immediately left of everything in its scope. Thus we can represent the wide scope reading of (32) (i.e. (25)) and the narrow scope reading (i.e. (26)) as follows:

(25) $\exists_1 x(Kx \ \& \ \sim Bx)$

(26) $\sim \exists_1 x(Kx \ \& \ Bx)$

(35) $[(ix)(Kx)] \ \sim B(ix)(Kx)$

(36) $\sim [[(ix)(Kx)] \ B(ix)(Kx)]$

However, it is obvious that there is nothing about the mere notation to stop us from doing the same trick with '[the K]_{SING}':

(37) $[\text{the } K]_{\text{SING}} \ \sim B[\text{the } K]_{\text{SING}}$

(38) $\sim [[\text{the } K]_{\text{SING}} \ B[\text{the } K]_{\text{SING}}]$

This might lead one to doubt that issues of scope offer genuine support for the theory of descriptions. If the *de re/de dicto* distinction can be accounted for by representing scope interactions between singular terms and logical operators, why should one cite the phenomenon in support of a quantificational analysis of descriptions? The short answer, Russell thinks, is that without the theory of descriptions, there is no explanation of the phenomenon. Russell's intention is to provide an explanation of how such scope ambiguities arise and how they can be resolved. In the above, (37) and (38) both succeed in disambiguating (32), but the process of disambiguation is entirely opaque without the theory of descriptions: it is only because (32) has the structure ascribed to it by the theory of descriptions that it can yield the two readings. Thus (37) and (38) are, effectively, nonsense. For the only justification for introducing scope distinctions is that descriptive sentences have the required structural complexity to support those distinctions.

The point can be seen clearly if one considers Dummett's (1973: appendix to Chapter 5) response to Kripke's modal objection to descriptive theories of names. Put roughly, Kripke's modal objection is as follows: The descriptivist supposes that a name (e.g. 'Aristotle') is synonymous with a definite description (e.g. 'the teacher of Alexander'). Kripke objects on the grounds that the name and the descriptions behave differently in counterfactual contexts. There are possible worlds in which Aristotle did not teach Alexander (a world in which one of them died before they could enter into the teacher–pupil relation, for example); yet there is no possible world in which Aristotle is not Aristotle. But in that case, 'Aristotle' and 'the teacher of Alexander' are not substitutable *salva veritate* within the scope of modal operators, as we can see from the falsity of (39) below contrasted with the truth of (40):

(39) Aristotle might not have been Aristotle

(40) Aristotle might not have been the teacher of Alexander

As Dummett points out, however, the assumption that (39) is false can be challenged by the descriptivist. For once it is admitted that names are disguised descriptions, it follows, *if one accepts the theory of descriptions*, that names have sufficient structural complexity to interact with modal operators in such a way as to generate scope ambiguities. This enables a true reading of (39), the logical form of which is given in (41) below, where the descriptive name has wide scope with respect to the modal operator. Only when the name takes narrow scope with respect to the modal operator, as in (42) (or what we may term 'intermediate'

scope, as in (43)), do we get the false reading of (39):

$$(41) \exists_1 x(Tx \ \& \ \Diamond \sim Tx)$$

$$(42) \Diamond \exists_1 x(Tx \ \& \ \sim Tx)$$

$$(43) \exists_1 x \Diamond (Tx \ \& \ \sim Tx)$$

The point to note, for the purposes of the current discussion, is that Dummett's response is made possible only by assuming a sufficient degree of logical complexity for definite descriptions. It would be *ad hoc* to make an appeal to scope interactions between names and modal operators if one insisted that names were singular terms.¹⁹ But, if one helps oneself to Russell and Whitehead's scope marking notation, such *ad hoc*ery may nonetheless be produced easily enough. After all, it would be quite legitimate for Dummett to employ a version of the device to preserve notational convenience, as in (44) and (45) below:

$$(44) [\text{Aristotle}] \Diamond \sim (\text{Aristotle} = \text{Aristotle})$$

$$(45) \Diamond \{[\text{Aristotle}] \sim (\text{Aristotle} = \text{Aristotle})\}$$

Evidently, however, without the backing of the contextual definitions of (44) and (45) that the theory of descriptions provides Dummett with (or some other account which bestows on proper names a sufficient degree of structural complexity in its place), these two formulas are incoherent: if Aristotle is genuinely a singular term, there can be no true reading of (39). Scope marking is legitimized for Dummett by his appeal to the theory of descriptions as a component of a descriptivist account of proper names, and remains illegitimate for anyone who maintains that proper names or descriptions are singular terms. Similarly, Russell is fully entitled to adopt scope marking conventions, and to appeal to them in accounting for the *de re/de dicto* distinction, while allowing description abstracts to behave in a manner indistinguishable from singular terms in certain contexts, as a consequence of the renditions of those contexts provided by the theory of descriptions. Without the theory of descriptions, there is no ambiguity to be resolved. If one insists that descriptions are singular terms, they cannot interact with other logical operators to generate scope ambiguities. Thus, however much the superficial similarities between Russell and Whitehead's '(ix)(\phi x)' and genuine singular terms might conceal the fact, it is only the theory of descriptions that justifies the adoption of scope-marking descriptions in *Principia* and elsewhere.

It is an unfortunate historical fact that the fundamental distinction between Russellian definite descriptions and singular terms, at

least when the former are satisfied, has not always been well observed. Russell and Whitehead's account of the description operator in *14 of *Principia Mathematica* invites confusion in this respect, an invitation apparently accepted by Quine (1953a: 154, nt. 9). For example, Russell and Whitehead state that they have shown that 'provided $(ix)(\phi x)$ exists, it has (speaking formally) all the logical properties of symbols which directly represent objects. Hence when $(ix)(\phi x)$ exists, the fact that it is an incomplete symbol becomes irrelevant to the truth-values of logical propositions in which it occurs' (Whitehead and Russell, 1925: 180). Perhaps this passage was responsible for leading Quine to erroneously conclude that scope is always irrelevant to truth-value, so long as the existence and uniqueness conditions are met by a descriptive symbol, in any context, on the Russellian view. This led him to think of Russell as an ally in his attack on quantification into intensional contexts, and to suggest that Smullyan's (1948) application of Russellian scope distinctions in quantifying into intensional contexts was a modification of the Russellian theory.

In fact, as many have noticed (most notably Neale, 1990 and Kripke, 2005), Quine has mistaken Russell and Whitehead's intention in a fundamental way. Allowing ourselves some slight tidying of Russell's characteristic failure to rigorously distinguish between incomplete symbols and the things that may satisfy them when the existence and uniqueness conditions are met in the passage just quoted, we may say that Russell's point here is just that when the existence and uniqueness conditions are met by a definite description ' $(ix)(\phi x)$ ', scope becomes irrelevant to the evaluation of *truth-functional* sentences containing ' $(ix)(\phi x)$ '. Thus, in truth-functional contexts, ' $(ix)(\phi x)$ ' behaves, logically, just like a Russellian singular term. The claim is quite explicitly restricted to truth-functional contexts. As Neale notes (1990: 137–138), even a very brief perusal of Russell's treatment of sentence (46) in 'On Denoting' should have reminded Quine that Russell didn't consider the fulfilment of the existence and uniqueness conditions as neutralising scope ambiguities in intensional contexts, as two (truth-conditionally) distinct readings of (46) below (i.e. (47) & (48)) are given there (see Russell, 1905c:52):

- (46) George IV wished to know whether Scott was the author of Waverley
- (47) $\exists_1 x(x \text{ authored Waverley} \ \& \ \text{George IV wished to know whether } x = s)$
- (48) George IV wished to know whether $\exists_1 x(x \text{ authored Waverley} \ \& \ x = s)$.

The important qualification on the comments made by Russell and Whitehead in *14 concerning the scope of descriptions for which the existence and uniqueness conditions are met, is that these comments are made in the context of discussing the formal language of *Principia*. As Kripke (2005) states, the comments are made about a series of *metatheorems* that demonstrate the features in question of that formal language. They are in no way intended to be comments on the semantics of descriptions, generally, in a natural language.

The apparent similarity of Russell and Whitehead's ' $(ix)(\phi x)$ ' to the singular term '[the F]_{SING}' in truth-functional contexts clearly does not challenge the Russellian analysis of the English 'the F ', then; it simply shows that the differences do not become semantically relevant until we step outside of truth-functional contexts. However, there is still something more to be said about Russell and Whitehead's description abstracts and their consequent need for a means of representing scope distinctions, which suggests that they did not fully appreciate the power of their own theory to break free from construing descriptions as singular terms. Although they didn't do it, it would have been possible for Russell and Whitehead to display scope distinctions directly, without the use of square-bracketed repetitions, by simply taking ' $(ix)(\phi x)$ ' to be a restricted quantifier. This approach is taken by Neale (1990), who eschews the notation of *Principia*, rendering phrases like 'the F ' as follows:

[the x : Fx]

which can combine with an open sentence ' Gx ' to form a closed sentence:

(49) [the x : Fx] (Gx)

in just the same way that an unrestricted quantifier such as ' $\forall x$ ' can. Another alternative, Neale suggests, is the notation of 'binary' quantification, which lends itself equally well to treating descriptions as quantifiers. On this approach, the quantifier '[the x]' combines with two open sentences (Fx, Gx) to form a closed sentence equivalent to (49):

(50) [the x] (Fx, Gx).

As Neale stresses, neither approach is an alternative, nor a modification, of Russell's theory of descriptions: '[the x : Fx] (Gx) is *definitionally*

equivalent to $(\exists x)((\forall y)(Fy \equiv x=y) \ \& \ Gx)$ ' (ibid.: 45). The notational variations are important for two reasons, however: (1) scope distinctions can now be adequately represented without recourse to additional scope markers of the kind needed in *Principia*; (2) the notation is naturally extended to embrace all determiner phrases, thus providing the perfect tool for conducting Neale's project of demonstrating that all determiner phrases are quantifiers.

The similarity between Neale's restricted quantifier notation and Russell and Whitehead's description abstracts is striking, and raises the question of why, if Neale is right that descriptions are just quantifiers on the theory of descriptions, didn't Russell simply adopt a similar approach, taking ' $(ix)(\phi x)$ ' to be a restricted quantifier that binds the variable x in any other formula within its scope? After all, as just noted in the passage quoted from Neale, '[the x : Fx] (Gx) ' is definitionally equivalent to ' $\exists_1 x(Fx \ \& \ Gx)$ ', and, as ' $\exists_1 x(Fx \ \& \ Gx)$ ' is also equivalent to ' $G(ix)(Fx)$ ', it surely follows that Neale's '[the x : Fx](Gx)' is definitionally equivalent to Russell and Whitehead's ' $G(ix)(Fx)$ '. The similarity ends there, however: Neale's symbol [the x : Fx] can only be meaningfully attached to an open sentence containing the variable x , whereas Russell and Whitehead's symbol ' $(ix)(Fx)$ ' replaces the variable in an open sentence. Russell and Whitehead want ' $(ix)(\phi x)$ ' to behave, syntactically, just like a singular term when it occurs in formulas of the formal language of *Principia*, not like a quantifier phrase. Neale is, of course, aware of this (see ibid.: 131). Nonetheless, it might be taken as pointing towards an objection to his claim that no distortion of the theory of descriptions results from adopting the notation of restricted quantification. Linsky (1999: 120–122), for example, suggests that attempts to locate a syntactic category in which to situate descriptions (e.g. 'quantifier', 'singular term', 'determiner phrase', 'noun phrase'), as well as attempts to deny that any such category can exist for a genuinely 'incomplete' symbol (as, for example, Kaplan, 1972 interprets Russell's position) will just lead us astray of the real target of the theory, namely to give an account of *logical constructions*. Whether one agrees with Linsky or not on this score (a decision that we will postpone until Chapter 4), it should certainly be noted that Russell and Whitehead never go as far as Neale does by actually stating that descriptions *are* quantifiers. Their claim is weaker than an assertion of identity: they only claim that sentences containing descriptive phrases are to be properly analysed into quantified propositions. For Russell and Whitehead this meant that descriptions are eliminated on analysis, rather than revealed as quantifiers in disguise. In this, they

are akin to class symbols, which are to be eliminated in accordance with contextual definitions as in *Principia's* *20.01:

$$*20.01. f\{\hat{Z}(\psi z)\}. =: (\exists \phi): \phi!x. \equiv_x. \psi x: f\{\phi!\hat{Z}\} \quad \text{Df.}$$

It would certainly be mistaking Russell and Whitehead's intention to take *20.01 as a statement to the effect that class symbols are quantifiers. The intention is rather to show that all apparent reference to classes is a kind of mathematical 'loose talk': a relaxing of the fully regimented language in which no such reference is possible. As such, *20.01 licenses the loose talk by showing how it can be eliminated. The contextual definitions of descriptive phrases such as that given in *14.01 are intended to license the use of descriptive phrases under similarly prescribed constraints. The theory of descriptions is thus much more than the claim that descriptions are a species of quantifier. However, Linsky's concern that the business of logical construction is in danger of being neglected by the recent focus on the syntactic characterization of descriptions is not warranted, or so I will argue in Chapter 4. While it seems unlikely that Russell and Whitehead themselves intended to identify descriptions with quantifiers (as they never explicitly said as much), the identification is perfectly consistent with the theory of descriptions so long as one does not forget the crucial qualification that the quantifiers themselves are incomplete symbols, according to the theory of descriptions. So long as this is remembered, the claim that descriptions are logical constructions, or 'symbolic conveniences',²⁰ will not be overlooked: for the universal and existential quantifiers have no more meaning in isolation than descriptions, and hence no distortion of Russell's position results from the identification. Indeed, the identification provides a service to the theory, by making it plain that the theory of descriptions, as first stated in 'On Denoting', applies to a class of phrases that includes, but is not exhausted by, definite descriptions. It is all of these phrases that are 'incomplete'; i.e., none of them are referring terms, and this is what was crucial to Russell's project, as we will see in Chapter 4.

Before concluding this discussion of scope phenomena, it is worth briefly noting that in a recent article, Kripke (2005) has shown how two of Russell's most famous examples in 'On Denoting', designed to demonstrate the power of the theory of descriptions to accurately disambiguate scope ambiguities, turn out, in fact, to be incorrect. One has been corrected in a thoroughly Russellian way by Nathan Salmon. The second remains more problematic. The first example is that mentioned

earlier of the touchy yacht owner's exchange with his guest. Recall that Russell disambiguates the guest's remark (51) as follows:

- (51) I thought that your yacht was larger than it is.
- (52) The size that I thought your yacht was is greater than the size your yacht is.
- (53) I thought the size of your yacht was greater than the size of your yacht.

The guest's intended meaning, Russell claims, is given by (52), while (53) is attributed to him by the touchy yacht owner. But, as Kripke point out, this cannot be correct, for (52) implies that there is a definite size, greater than the actual size of the yacht, that the guest believed the yacht to be. But this clearly need not be the case. The guest simply expected the yacht to be larger than it turned out to be: he almost certainly did not have a specific size in mind that he believed to be the size of the yacht. Thus, as Salmon (2009) puts it in his recent discussion of Kripke's objection, 'In that case, the description, "the size I thought your yacht was" is improper. Russell's distinction of primary and secondary occurrence therefore appears to be of no help in removing the misunderstanding. Indeed, it seems that definite descriptions, as such, are entirely irrelevant to the example' (Salmon, 2009: 352). Russell's mistake, as Salmon shows, is to offer (52) as the guest's response. In fact (52) and (53) do not differ in terms of scope, as Russell suggests: rather they contain *different* descriptions. It seems reasonable to analyse (51) by uncovering the definite description 'the size of your yacht' (it is this which is really at issue in the exchange after all). But, if the ambiguity is really just a matter of scope, the same descriptions should occur in both the guest's meaning as well as that attributed to him by the touchy owner, otherwise the ambiguity will be nothing to do with the theory of descriptions as such. Yet, in Russell's proposal, the description 'the size I thought your yacht was' features in (52) but not in (53). Hence the difference between the two cannot solely be down to scope.

Salmon's solution to this problem is to point out that (53) is not devoid of ambiguity. In fact, both the guest's meaning and that attributed to him can be recovered from it. The guest's meaning is given in (54), and the other in (55) below:

- (54) There is a size r that is a unique size of your yacht and I thought: that a unique size of your yacht was greater than r .

- (55) I thought: that a unique size of your yacht was greater than a unique size of your yacht.

Thus, with the example corrected by Salmon, we can see that Russell was indeed correct to diagnose the misinterpretation as stemming from scope ambiguities of descriptive propositions.

Salmon (ibid.: 361, ft. nt. 27) has also offered a response to the second of Kripke's objections, but it is more controversial than his response to the first objection, both in itself, and also in terms of whether it would be accessible to Russell. The objection is directed at Russell's appeal to scope distinctions in solving his famous puzzle concerning George IV's potentially literary enquiry (depending on scope, it may have nothing to do with literature):

If *a* is identical with *b*, whatever is true of one is true of the other, and either may be substituted for the other in any proposition without altering the truth or falsehood of that proposition. Now George IV wished to know whether Scott was the author of *Waverley*; and in fact Scott was the author of *Waverley*. Hence we may substitute *Scott* for *the author of 'Waverley'*, and thereby prove that George IV wished to know whether Scott was Scott. Yet an interest in the law of identity can hardly be attributed to the first gentleman of Europe.

(Russell, 1905c: 47–48)

Russell suggests that the theory of descriptions solves the puzzle by, again, disambiguating 'George IV wished to know whether Scott was the author of *Waverley*' in terms of the scope of 'the author of *Waverley*':

When we say 'George IV wished to know whether Scott was the author of *Waverley*', we normally mean 'George IV wished to know whether one and only one man wrote *Waverley* and Scott was that man'; but we *may* also mean: 'One and only one man wrote *Waverley*, and George IV wished to know whether Scott was that man' ... The latter might be expressed by 'George IV wished to know, concerning the man who in fact wrote *Waverley*, whether he was Scott'. This would be true, for example, if George IV had seen Scott at a distance, and had asked 'Is that Scott?'

(ibid.: 52)

Clearly these two readings are consequences of scope ambiguities, but Kripke argues that the proposed disambiguation fails to solve the

puzzle as originally stated. The point is that the *de re* reading of George IV's question does attribute an interest in the law of identity to him, after all. Russell is clearly assuming, along with common sense, that visual perception is sufficient to allow one to apprehend singular propositions about the things perceived. But, in that case, George IV is not enquiring after the truth of a descriptive proposition (when the description is given wide scope in the attitude ascription), but a singular one, namely (56):

(56) $\langle\langle\text{Scott}\rangle, \text{identity}\rangle$

Soames (2003: ch. 5) has also noticed this. He points out that Russell's later narrowing of the kinds of things we can be acquainted with would get him out of the problem here: if we can only have knowledge by description of Scott, George IV will be enquiring after the truth-value of a descriptive proposition. However, as he notes, this would destroy the example. Furthermore, most of us would not want to be driven to endorse either the claim that 'Scott' is a disguised description, or Russell's constrictive sense-data epistemology, simply to defend the claim that the theory of descriptions solves this particular puzzle.

Salmon's solution to the puzzle draws on a distinction he has employed elsewhere (see Salmon, 1986a and 1992) between the singular proposition expressed by ' $a = a$ ', containing a binary relation, and the singular proposition expressed by ' a is a thing-identical-with-itself' (which is symbolized: ' $(\lambda x)[x = x](a)$ '), containing a monadic property $(\lambda x)[x = x]$. Thus, George IV can consistently wonder whether Scott is Scott, but cannot doubt that $(\lambda x)[x = x](\text{Scott})$. Whether or not Salmon's solution is a good one, it is evident that it concedes the failure of Russell's original claim that the example commended the theory of descriptions. Without a solution to Frege's puzzle as a puzzle about singular propositions, the wide scope reading of (51) leaves George IV in the cognitive position Russell wants his theory to free him from. To secure that freedom, then, Russell would need to make an independent appeal, either to a theoretical explanation of the cognitive significance of certain (singular) identity statements, or to some principled way of restricting access to singular propositions about perceptually present individuals so as to ensure that the wide scope reading of (51) does not put George IV into a dyadic relation with a singular proposition about Scott after all. There is no evidence whatsoever that he envisaged an appeal of the first sort. It seems likely, however, that he was presupposing something like the second appeal, in the form of the description theory of names.

The description theory of names may not have been publicly paraded in 'On Denoting', but it had been present in Russell's thinking, as manuscript evidence reveals, since before the discovery of the theory of descriptions. The following passage, from a manuscript written in late 1903,²¹ gives a clear statement of the assimilation of (grammatically) proper names to definite descriptions. It even hints at a 'cluster' theory of the descriptive meanings of proper names. Furthermore, though Russell's targets here are fictional names, the extension of the theory to the proper names of (actual) famous individuals points the way to the kind of treatment of 'Scott' that Russell may have assumed in the 'On Denoting' example:

There is ... plainly a proper and an improper use of the word *Apollo*, from which it follows that, since nothing is denoted by it, something must be meant. This is, in fact, a general principle with imaginary persons or events; they have not, like actual ones, a definition as *just this*, but they are described by means of a collection of characteristics, of the combination of which they are conceived to be the only instance. Thus when we look up *Apollo* (if we ever do) in a classical dictionary, we find a description which is really a definition; but when we look up (say) Aeschylus, we find a number of statements of which no single one is merely a definition, for Aeschylus was who he was, and *every* statement about him is not tautologous. Thus *Apollo* is not a proper name like Aeschylus; and even genuine proper names, when they belong to interesting people, tend to become names which have meaning. If we ask: 'Was there such a person as Homer?', the *meaning* of the word *Homer* is fixed, and the question is: Does this meaning denote anything? Thus imaginary proper names are really substitutes for descriptions.

(Russell, 1903b: 285)

The theory germinating in this passage is almost universally held to have been refuted by Kripke's (1980) attack on it and the related doctrines it has spawned. If Russell really was assuming such a theory when providing the George IV example in 'On Denoting', we had better not follow him in sharing the assumption. Notice, however, that the theory is quite independent of the Russellian theory of descriptions. The theory of descriptions had not even been discovered at the time Russell wrote this passage. It cannot therefore be the theory of descriptions that motivated Russell to adopt the description theory of names. Yet if Russell is assuming the description theory of names in the George IV example (as I have suggested must have been the case), then his solution

to Kripke's puzzle is also provided by something external to the theory of descriptions. It is the status of 'Scott' as a disguised description that means George IV is not merely interested in the reflexivity of identity.

In response to the puzzle, Kripke says, 'the doctrine of acquaintance better be narrowed as much as possible to get rid of these examples, even though they seem like common sense' (Kripke, 2005: 1025). To follow Kripke's advice here, however, will also be to look outside of the theory of descriptions for a solution, for there is no more reason to hold that the theory of descriptions has an essential tie to the principle of acquaintance than to hold that it has an essential tie to the description theory of names. In other words, whatever the correct puzzle to the solution turns out to be, it will be independent of the theory of descriptions: Russell was simply wrong to claim that the theory of descriptions solves the puzzle of George IV's query. It locates a genuine syntactic ambiguity in (51), but the puzzle remains after disambiguation, and the removal of that puzzle will require a solution to Frege's puzzle as it applies to propositions that lie outside the analysis of the theory of descriptions. In Chapter 6, I will suggest a Russellian solution to the puzzle. This proposal will, for the reasons just stated, however, make no appeal to the theory of descriptions.

To conclude the overview of the theory of descriptions, the final section of this chapter will briefly survey some of the most influential responses that the theory of descriptions has attracted over the hundred or so years since it was first published. The survey will be very far from complete – it is simply my intention to briefly summarize the key developments in the treatment of definite descriptions since 'On Denoting', as these will often be assumed as background to discussions later in the book.

1.5 The reception of the theory of descriptions

In a brief historical overview of the philosophical treatment of definite descriptions, written to commemorate the centenary of 'On Denoting', Stephen Neale writes: 'it is undeniable that the theory's impact later in the century and the principal reasons it is still such a lively and fertile topic of philosophical (rather than historical) debate lie in the philosophy of language' (Neale, 2005: 811). In fact, it is not unfair to say that the contribution 'On Denoting' made to the philosophy of language was so far ahead of its time that it took the philosophy of language almost half a century to catch up. It is now universally accepted as one of the most important contributions to the field. Canonization

of the theory was spurred on, as is often the case in philosophy, by the publication of the first serious assault on the theory. Strawson's 1950 paper 'On Referring' took a position diametrically opposed to Russell's, both with regard to the specific topic – the analysis of definite descriptions – and more widely with regard to the general outlook, inspired by Russell's work on logic, which sought to approach natural language semantics as a formal enterprise, effectively reducing linguistics to a branch of applied mathematics.²² As a consequence, Strawson made the local topic of definite descriptions the focus of a global debate about the relative merits of semantics (the analysis of linguistic meaning) and pragmatics (the analysis of speaker's meanings) – a debate that continues with little sign of abatement or resolution to this day.

Centrally important to Strawson's position is the idea that what matters to meaning is not linguistic items alone, but the things that speakers do with them. Sentences, be they types or tokens, are not true or false, for example. Statements are true or false, and statements are things that speakers use sentences to make. This pragmatic turn marks a fundamental division between Russell and Strawson. Whereas the theory of descriptions assigns to every descriptive sentence a truth-value in accordance with truth-conditions that are determined solely by the form and constituents of the sentence, Strawson's pragmatic analysis assigns truth-values to utterances. This introduces additional complexities that Strawson takes Russell to have overlooked at his cost. Utterances must conform to communicative rules and conventions if they are to be successful devices of communication. One such convention, Strawson suggests, is *presupposition*. Interpretation of an utterance of a sentence containing an NP relies (standardly, at least)²³ on the presupposition that the NP has a denotation. If, in fact, the NP does not have a denotation, the utterance will not succeed in communicating a proposition. Or, to put it another way, nothing true or false will have been said.²⁴

The real force of Strawson's point here seems to be only partially appreciated by Russell in his (1957) reply to Strawson. Fixing on Strawson's observation that an utterance of Russell's sentence 'the present King of France is bald' will have a truth-value if uttered at a time when France has a monarchy, Russell rather condescendingly retorts that 'As regards "the present king of France", [Strawson] fastens upon the egocentric word "present" and does not seem able to grasp that if, for the word "present" I had substituted the words "in 1905", the whole of his argument would have collapsed' (Russell, 1957: 210). But this reply will not deflect Strawson's objection, for suppose I now utter the sentence 'the King of France in 3010 will be bald'. What, if anything, is the truth-value

of this utterance? To answer that question satisfactorily would require a lengthy digression into the semantics of future tense sentences that I do not intend to make. The only point that matters is that there is a strong intuition for many that this sentence, uttered now, lacks a truth-value. Yet the indexical expression 'present' does not feature in it, and therefore cannot be the sole source of the intuition as Russell suggests. Russell is unreasonable, and incorrect, in his portrayal of Strawson as simply fixated on the indexicality of the original sentence.

Equally Russell's riposte that Strawson's analysis cuts little ice when it comes to sentences of mathematics (ibid.: 121) is hardly decisive – even during times of French monarchy, France has not been ruled by a mathematical object, so the English sentence 'the present King of France is bald' (or 'the King of France in 1905 was bald') stands in need of analysis independently of any sentences of mathematics. Strawson would be quite entitled to concede to Russell the effectiveness of the theory of descriptions for analysing descriptive sentences in mathematics in a way that is consistent with our intuitions about the existence assumptions of the subject, while maintaining that it is inadequate for utterances of non-mathematical sentences. This would surely warrant his accusation that Russell has failed to explain the semantics of the *English* word 'the'.

An adequate response to Strawson must therefore argue that Strawson is wrong, and systematically wrong, to think that presupposition is required for the meaningful employment of definite descriptions. Located as this dispute is within a wider ideological dispute about the boundary between semantics and pragmatics, the debate between Russellians and Strawsonians often shapes up as a clash of intuitions that can seem impossible to resolve. While Strawson offers examples that seem to support the intuition that presupposition plays a role in the truth-conditions of utterances, as Neale (1990: ch. 3) points out, it is relatively easy to find examples that support the counter-intuition (i.e. support Russell's position) that utterances of sentences containing empty descriptions are meaningful. For example (to modify one of Neale's examples a little), it seems obvious that, had Russell uttered (57) below at any time during his lifetime, he would have said something not only intelligible but also incontrovertibly false):

(57) Yesterday, I dined with the present King of France.

So while it is undeniable that Strawson has identified an important pragmatic phenomenon in presupposition, it is less clear what impact the phenomenon has on truth-conditional semantics.²⁵

In addition to his positive pragmatic proposal, Strawson raised an important objection to the theory of descriptions in 'On Referring'. The objection concerns, not empty definite descriptions, but what have become known as 'incomplete' descriptions. A description is incomplete if it is definite, is used to pick out a unique item, yet does not explicitly state the uniqueness condition required to do this. For example, the description 'the man' may be used to pick out a particular man, but there is no explicitly stated descriptive material contained in the expression that is sufficiently fine-grained to distinguish one man from any other. Objectors to the theory of descriptions appeal to such cases as evidence that descriptions must be used referentially in such cases – it is the fact that (perhaps assisted by the necessary pragmatic mechanisms) the expression is used to *refer* to a particular man that facilitates its picking out that individual only. The problem can seem particularly challenging for Russell as, on the analysis one naturally expects from the theory of descriptions, sentences that are intuitively true will turn out to be false. For example, if I say to my wife, 'the TV is broken', when our (one and only) TV has broken, this would appear to be straightforwardly true. But the theory of descriptions seems to predict otherwise, as it reparses the sentence I have uttered to express the proposition that there is one and only one broken television. A little reflection shows that such cases are ubiquitous in any natural language. How should the Russellian respond to them?

In fact the ubiquity extends beyond cases involving definite descriptions, and this provides the Russellian with a response to Strawson's objection. The problem of incompleteness seems to be an instance of the more general problem of explaining quantifier-restriction in natural language. A couple of examples will help to explain what this phenomenon is. First, imagine the following scenario. I am giving a lecture on the theory of descriptions to a class of undergraduate students. Remarkably, they are bored. After the lecture, my colleague asks: 'how did your lecture on the theory of descriptions go?' I reply: 'everyone was bored during it'. Now suppose that my colleague were to reply: 'On the contrary, at the time I was in the library reading a gripping book – I wasn't bored. So not *everyone* was bored'. My colleague's reply is infelicitous. Why? Because he or she clearly was not intended to be within the range of the quantifier 'everyone' in my original reply to their question. An unstated contextual restriction was imposed on the quantifier, restricting it to the domain of people occupying the lecture theatre. The phenomenon is not unique to universal quantification. Consider the following example. A review of teaching quality is

being conducted at the University of Manchester, and I am arranging for the review panel to meet students from the Philosophy department. In the context of discussing this meeting, I ask a member of administrative staff to invite some students. When I arrive at the meeting the following week, I am confronted by a group of Computer Science students from the University of Paderborn, in Germany. I would clearly be entitled to accuse the administrator who had invited them of failing to fulfil my request. Were they to defend themselves by pointing out the range of the quantifier phrase 'some students', their defence would again be infelicitous. The quantifier phrase was contextually restricted in a wholly unambiguous way to the domain of Philosophy students at the University of Manchester.

Quite how to handle quantifier-restriction is a difficult question. We have two options: (1) we could argue that the sentence uttered was elliptical for another sentence that contains material further restricting the range of the quantifier; or (2) we could argue that pragmatic processes contextually restrict the universe of discourse, so that the quantifiers have no unarticulated restrictions, but we contextually impose a restriction on what we take the universe of our discourse to be. It is very hard to mount a defence of (1) that is neither *ad hoc* nor question-begging,²⁶ so (2) appears more promising. The details of how such a contextual restriction is imposed, however, are not straightforward and are the subject of ongoing debates in the literature on pragmatics. Whatever the outcome of those debates, however, the defence of the theory of descriptions needs only to note that descriptions are not unique in facing this problem. Furthermore, the fact that descriptions cluster with expressions that are universally accepted to be quantifier phrases provides strong evidence in support of the theory that definite descriptions are quantificational, not referential, devices.

The next important development in our understanding of definite descriptions came from the work of Keith Donnellan. Donnellan (1966) argued that descriptions have a 'duality of function' in ordinary speech, which is overlooked by both Russell and Strawson. Donnellan provides examples to show that definite descriptions sometimes function as devices of reference, and sometimes as devices of quantification. So, in a way, he is arguing that Russell and Strawson are both partially right (and, by the same token, both partially wrong). The first sort of function, Donnellan calls the 'referential use' of a description; the second is the 'attributive use'. Donnellan gives the following examples to illustrate the two uses. First imagine that Smith is found dead, his death brought about by countless horrendous stab wounds. Confronted by

this scene, one may exclaim ‘Smith’s murderer is insane’. If we assume that the person who makes this utterance has no idea who killed Smith, they cannot have any particular person in mind. This is an attributive use of the description. It is captured by the Russellian analysis, which paraphrases ‘Smith’s murderer [i.e. the murderer of Smith] is insane’ as ‘one and only one thing murdered Smith and that thing is insane’. To use the terminology introduced earlier, the proposition expressed here is an object-independent one: no particular object that murdered Smith is what this proposition is about. If Smith was not actually murdered, but died as a result of a bizarre accident (Smith was foolishly juggling with knives, say), the utterance will be false.

Now consider the following case. A suspect, Jones, has been charged with Smith’s murder and is placed on trial. Suppose that Jones announces in the courtroom that he did indeed murder Smith, under instructions from God. A member of the jury turns to the person beside them and whispers: ‘Smith’s murderer is insane’. Here the Russellian analysis fails, for there is a particular object, namely Jones, who this proposition is about. This can be made evident by considering a case of *misdescription*: If Smith was not actually murdered, but died as a result of his foolish knife-juggling habits, and Jones is claiming responsibility for the murder because he is labouring under a psychotic delusion, the proposition will be true, contrary to what Russell’s analysis predicts. All that matters to the truth-conditions of the proposition is Jones and his mental state. We have, in other words, a singular proposition expressed about Jones in this context. This is a referential use of the description.

Referential uses allow for the possibility of misdescription, though they do not demand or depend on it. If Jones *had* murdered Smith, the juror would still have been using the description referentially, but it would not have been a misdescription. In that case, Strawson’s theory appears to make the correct predictions about the truth-conditions of the utterance. But once we encounter misdescriptions of the sort just described, Strawson’s theory also makes incorrect predictions – for, in cases of presupposition-failure (as when, in 2010, I assert something of the present King of France), Strawson’s theory has it that nothing true or false is said.

A natural response to Donnellan’s ingenious examples is to infer that the Russellian and the Strawsonian theories of descriptions are incomplete. Presupposition of reference can fail in attributive uses and in referential uses that involve misdescription, while all referential uses escape analysis on the Russellian, quantificational, model. Should we conclude that descriptions are ambiguous expressions, sometimes

referring to objects, sometimes quantifying over them? This response is unsatisfactory for a number of reasons. Not least among these reasons is the theoretical cost of positing such (apparently unsystematic) ambiguities in a semantic theory. Kripke (1979) objected to the ambiguity response on these grounds, saying:

It is very much the lazy man's approach in philosophy to posit ambiguities when in trouble. If we face a putative counterexample to our favourite philosophical thesis, it is always open to us to protest that some key term is being used in a special sense, different from its use in the thesis. We may be right, but the ease of the move should counsel a policy of caution: Do not posit an ambiguity unless you are really forced to, unless there are really compelling theoretical or intuitive grounds to suppose that an ambiguity is really present.

(Kripke, 1979: 243)

As Kripke notes, we certainly do not seem to be forced to accept an ambiguity in the case under discussion. And, furthermore, there are parallel cases where we certainly would not posit any ambiguity. If two people see Smith in the distance, mowing his lawn, and mistake him for Jones, they may discuss Smith, using the name 'Jones', by commenting on the actions of the person in the distance (e.g. one says, 'what is Jones doing?' and the other replies 'Jones is mowing his lawn'). Yet this is clearly not a good reason to take the name 'Jones' as an ambiguous expression, with the two semantic values Smith and Jones. After all, the two participants in the conversation have made a mistake here, which they would not have done if 'Jones' was ambiguous. The explanation of their linguistic behaviour is not that they are using an ambiguous expression, but that they have misidentified some object. But if we do not need to resort to positing an ambiguity in this case, we should be wary of positing one in cases involving descriptions, without the 'compelling theoretical or intuitive grounds' required to warrant the ambiguity approach for descriptions alone.

Kripke goes on to argue that, not only do we not have such grounds, but the explanation of what happens in the simple Smith–Jones case, can be naturally extended to cases involving definite descriptions. In the former case, the two participants in the conversation have mistaken Smith for Jones. So they say things about Jones that they each intend to be about the object they are seeing in the distance (Smith). The reference of the term they are using (namely Jones), has come apart from the reference they intend (or mistakenly think) it to have (namely

the object they are seeing in the distance – that is, Smith). We can explain the situation by distinguishing semantic reference (what the name ‘Jones’ really refers to) from speaker’s reference (the object that a speaker may use the name to refer to in a given situation). Accordingly, a speaker may say something that is literally false (e.g. that Jones is mowing his lawn), while meaning and communicating something true (e.g. that Smith is mowing his lawn). Applying the same model to those referential cases involving misdescription, we can say that an utterance of ‘The F is G’, used referentially to communicate the information that some non-F is G, has as its literal meaning the false proposition that one and only one F is G, but is *used by the speaker to mean* that the particular (non-F) object in question is G. The referential use, in other words, can be accounted for *pragmatically* rather than *semantically*. Thus we maintain the Russellian truth-conditions for all descriptive propositions, but accommodate referential uses of descriptions within a pragmatic theory of how speakers’ uses of language may deviate from their literal meanings. The literature on pragmatics already abounds with examples where speaker-meaning and literal meaning diverge. Grice (1989) developed a theory of ‘conversational implicature’ to explain such divergences. All that we need to do to account for referential uses of definite descriptions within a Russellian framework, according to Kripke, is to extend the Gricean theory to encompass similar interactions between the semantic and the pragmatic at the level of reference.

This completes the project of this chapter, which was to provide an overview of the theory of descriptions that was independent of the exact history of the theory. In the next two chapters I will restore some balance to this account by exploring the historical details of the theory and how it fits into Russell’s philosophical development in detail.

2

History I: The 1903 Theory of Denoting

2.1 Introduction

In the previous chapter, I examined the theory of descriptions from a largely ahistorical perspective. In particular, I ignored the historical and exegetical details of the role played by the theory in Russell's philosophical project and its development. In this chapter and the following one, I will address historical aspects of the development of the theory. To some extent, the separation of the philosophical from the historical that has been made in these first three chapters reflects the response that the theory has received from philosophers since its inception, with many philosophers responding to the theory with little or no regard for the particular philosophical aims and concerns that motivated Russell when devising the theory. The understanding of the place of the theory in Russell's overall philosophy has been left to historians who, in turn, have been fairly universal in their conclusion that the impact the theory has had on contemporary philosophy – primarily on the philosophy of language – is the result of an application of the theory to concerns that were quite alien to Russell himself. Although these first two chapters have also repeated the strategy of separating the place of the theory in contemporary philosophy from its place in Russell's own philosophy, the strategy is employed here for ease of exposition only. As will become clearer in later chapters (particularly Chapters 4 and 7), I aim to reject the interpretation of the theory of descriptions as a theory that led a double life, behaving differently for its author than for those who were engaged by it, whether for or against. In particular, I will argue that the importance of the theory to the philosophy of language relates more closely to Russell's own concerns than the current orthodoxy in Russell scholarship maintains. For the time being, however, these more general

aims of the book will be put to one side in favour of the immediate task of understanding how and why Russell arrived at the theory of descriptions that was first presented to the public in 1905.

The historical treatment of the theory has had an eventful history of its own. We can roughly characterize the changing perceptions of the place of the theory in Russell's philosophical development as dividing into four interpretations. Originally, under the influence of logical positivism, Wittgenstein, and the ordinary language movement, the theory was interpreted as a contribution to 'linguistic philosophy'.¹ This interpretation, though not shared by all at the time, was the consensus view until it was replaced by an interpretation that recognized the ontological importance of the theory to Russell. The most influential proponent of this interpretation was Quine. In particular, Quine popularized the interpretation of the theory that construed it as a means of ridding Russell of unwanted ontological commitments to Meinongian objects which, according to Quine, were a consequence of the semantic theory of *The Principles of Mathematics*. Russell himself made several remarks later on in his career that appeared to lend support to Quine's interpretation, and such was the popularity of this view that it remains the most common interpretation one encounters today. All the same, the interpretation has been challenged. Increased attention to the details of Russell's theory of denoting in 1903 has called into question the assumption, central to the Quinean interpretation, that Russell really was committed to any version of Meinongianism prior to adopting the theory of descriptions.

The search for an alternative explanation of what was driving Russell in the period between *The Principles* and 'On Denoting' took its next cue from more (rather cryptic) remarks in Russell's later autobiographical writings, to arrive at the third class of interpretations. According to this line of interpretation, Russell's real motivation in developing the theory of descriptions was his desire to solve the famous contradiction he had discovered in Frege's formal system (and the system that he himself envisaged at the time). The final major twist in the interpretation of the theory came in 1994 with the publication of Russell's manuscripts from the period immediately leading up to his composition of 'On Denoting'. One manuscript in particular, 'On Fundamentals', which was written shortly before 'On Denoting' in 1904, captures the very moment when Russell first hit upon the theory. He does so, however, not in response to considerations from linguistics, nor in response to concerns about Meinongianism or the contradiction besetting Frege's theory. The theory actually emerges from Russell's consideration of one

of the most enigmatic arguments he ever published: the so-called *Gray's Elegy* Argument (GEA, hereafter), which features in 'On Denoting', and has frustrated most readers of that paper ever since. Exasperated by their attempts to decipher this notoriously intractable passage of the text, most commentators were relieved to note that it appeared to be little more than a curious tangent to the main argument of the paper. The task of understanding the GEA was therefore largely conducted as challenging sport, independent of the task of understanding the theory of descriptions. What the publication of 'On Fundamentals' revealed, however, was that the GEA played a far more central role in Russell's arrival at the theory than had previously been realized. Inspired by this new data, the latest wave of interpretations of the place of the theory in Russell's philosophy has looked to the GEA for an explanation of why Russell shifted from the 1903 to the 1905 theory of denoting.

My own view, which I will expound in this chapter and the next, sees something right about all of these different approaches to understanding the theory. Though Russell was certainly no ordinary language philosopher, he was, I believe, concerned with natural language. Though I will agree that Russell was not committed to Meinongianism in *The Principles*, there were ontological motivations behind his development of the theory of descriptions. Though the theory of descriptions was essential to Russell's proposed solution to the contradiction he had discovered in *Principia Mathematica*, this particular feature of the theory cannot, I think, have been known to him prior to his discovering the theory; thus it cannot fully explain his motivations in devoting such attention to denoting during 1903 and 1904.² Without these two possibilities (that is, Russell's desire to rid his ontology of Meinongian entities, and his knowledge of how the theory of descriptions could help avoid the paradoxes) available as explanations of why Russell shifted from one theory of denoting to the other, the GEA must take centre stage in the explanation. I will begin to make sense of the whole episode by examining, and rejecting, the interpretation that sees the theory of descriptions as an attack on the alleged Meinongianism of the *Principles* in this chapter. I will then turn to the issue of what connection the theory has with Russell's response to the contradiction in the next chapter, where I will also assess the role played by the GEA in the genesis of the theory.

2.2 The standard reading

Until recently it was standard to interpret Russell as endorsing a rather crude ontology of non-existent 'Meinongian' entities in 1903, which

was a consequence of Russell's belief that every meaningful word must refer to something – a belief subsequently rejected in 1905's 'On Denoting'. This view originated with Quine's influential essay 'Russell's Ontological Development'. Recent studies of Russell reject Quine's simplistic story, pointing out sections in the *Principles* where Russell draws on his early theory of denoting to allow for cases of genuine reference-failure. However, such interpretations have maintained that some commitment to Meinongian entities remains, for example in the case of empty proper names, or true denials of existence.

Furthermore, there is a widespread perception of Russell's semantic outlook which assumes on seemingly *a priori* grounds that Meinongianism is the only alternative to the theory of descriptions for a Russellian. So, for example, Stephen Neale, in his *Descriptions*, presents the Meinongian interpretation of the early Russell in order to explain Russell's subsequent adoption of the 1905 theory of descriptions (Neale, 1990: 5). It is tempting to dismiss Neale's attribution of Meinongianism to the early Russell as no more than a failure to take into account the more subtle examples of Russell scholarship that have exposed the traditional, Quinean, story as flawed. But there is more to Neale's position than an uncritical acceptance of orthodoxy. As the following passage shows, Neale is assuming that only the theory of descriptions provided Russell with sufficient semantic resources to accommodate reference-failure:

According to Russell, if a putative referring expression '*b*' can be supposed not to refer, yet a sentence containing '*b*' still be supposed to express a determinate thought, then '*b*' cannot be a genuine referring expression. Whenever we encounter such a situation, the *Theory of Descriptions* is to be wheeled out and the sentence given a logical parsing in which there is no genuine 'subject.' For the whole purpose of the Theory of Descriptions is to make available a special class of *object-independent* thoughts.

(ibid.: 5)

Neale, correctly, takes a central component of Russell's semantic theory to be the principle that no genuine singular term can fail to refer. Thus, propositions containing a genuine singular term '*a*' (a 'logically proper name') are, in Neale's phrase (as explained in the previous chapter), *object-dependent* propositions: propositions which cannot be meaningful at all unless the object that '*a*' refers to exists. The theory of descriptions, by contrast, provides an account of *object-independent*

propositions: these are propositions that do not require the existence of their apparent subjects in order to be meaningful. If, like Neale, one assumes that the 1903 theory of denoting cannot make available this special class of object-independent thoughts (or propositions), and accepts a Russellian account of genuine singular reference, then it seems to follow that the 1903 theory must reduce every proposition to an object-dependent one. Thus names of non-existents must name Meinongian objects.

The mistake Neale makes, I will argue, is to think that *only* the theory of descriptions is capable of providing for object-independent propositions within the framework of a Russellian semantic theory. The 1903 theory of denoting is also able to make available the special class of propositions that Neale refers to. Indeed, in what follows I will argue that Russell's 1903 semantics is sufficiently sophisticated to be defended against *all* accusations of Meinongianism. I begin by establishing more clearly just what is meant by calling an ontology 'Meinongian'.

2.3 Russell's alleged 'Meinongianism'

Few people bear more guilt than Quine for ensuring a bad press for Russell's ontological development.³ His influential (1966) take on Russell's ontology offers a portrait of Russell in the grip of an outlandish ontological vision in 1903's *Principles of Mathematics*, which only differs from Meinong's outlook insofar as it lacks the latter's clarity and sophistication (ibid., pp. 4–5). Only the discovery of the celebrated theory of descriptions of 'On Denoting' was sufficient to bring Russell to his senses, according to Quine.

What exactly is the accusation of 'Meinongianism' an accusation of? It cannot be that Russell's early ontology is Meinongian simply in virtue of granting the reality of non-existent entities. Even after the adoption of the 1905 theory of descriptions, Russell endorses such things. For example, in his (1905a), he attributes this status to a number of things including propositions: 'we must admit that there are entities which do not exist; and among these must be placed the entities which are true or false, which are what I call propositions' (p. 496). As Russell explains in 'The Existential Import of Propositions', published shortly before 'On Denoting', he takes the word 'existence' to be ambiguous between at least two distinct meanings. One meaning of the word is synonymous with phrases such as 'spatio-temporally located', the other is reserved for use in mathematical logic, meaning no more than that a given class is non-empty (Russell, 1905b, pp. 98–99). In the *Principles*,

Russell sought to disambiguate these two senses by employing the term 'being' to denote the kind of reality had by abstract objects. But, again, Russell's ontology cannot be Meinongian in the required senses simply insofar as it countenances the being of abstracta. If Meinongian objects are whatever objects are to be disposed of by the theory of descriptions, they do not include the various abstract objects that remained after 1905. Classes, admittedly, would soon be dropped with the adoption of Russell's 'no-classes theory', thus complicating the issue of what status numbers (being classes of a specific kind) have in Russell's ontology; but propositions, as we have already seen, remained, as did universals. Russell makes fully explicit in a letter of 1906 that the distinction between being and existence still played this role in his philosophy after the adoption of the theory of descriptions:

The object of any abstract thought is not a thought, either of the thinker of anyone else, and does not *exist* at all, though it *is* something. Thus in mathematics a new theorem is a discovery in the sense that the discoverer for the first time apprehends the fact discovered, which fact has a timeless being, not existence ... the things that actually exist or have existed or will exist are only some among the things one can think of; but whatever one can think of must be something, and must be other than the thought of it. And mathematical objects are all of them among the things that don't exist. Nobody can point to a place where (say) the 5th proposition of Euclid is to be seen growing in a pot.

(Russell to Margaret Llewelyn Davies,
26 March 1906, in Russell, 1992, p. 298)

The extent to which Russell's (or anybody else's) ontology can be termed 'Meinongian' therefore must be a matter of *which kinds* of objects are taken to have being and on what grounds, rather than simply a matter of acknowledging being as an ontological category in addition to existence. In what follows, I will use the term 'Meinongianism' to denote a certain kind of ontological position which is primarily motivated by semantic considerations: I will use the term to denote any ontological position which takes the existence of an object to follow immediately from the use of a term to refer to that object so as to express a proposition about it, and which treats the question whether a term is a referring term to be wholly answered by observation of its grammatical behaviour. Any expression located in the grammatical category of noun-phrases cannot fail to refer to an object on this definition.⁴

Meinongianism, as I have defined it, thus takes reference-failure to be an illusion. Empty singular terms are only apparently empty; though they do not refer to anything existent, they refer all the same to something non-existent. That something is an entity simply by virtue of being named. This definition seems to capture the thought expressed in the passages of the *Principles* that troubled Quine. In particular it captures the assumption present in comments like 'Words all have meaning in the simple sense that they stand for something other than themselves' (Russell, 1903a: § 51), and 'every word occurring in a sentence must have some meaning' (ibid.: § 46), at least as they are glossed by Quine: 'Russell's ontology was unrestrained. Every word referred to something' (Quine, 1966, p. 4). It is obvious how the theory of descriptions improves on Meinongianism thus construed.

Quine's interpretation is not without a fair amount of apparent support in the *Principles*. Perhaps the most famous passage seeming to lend such support is the following:

Numbers, the Homeric gods, relations, chimeras and four-dimensional spaces all have being, for if they were not entities of a kind, we could make no propositions about them. Thus being is a general attribute of everything, and to mention anything is to show that it is ... *Existence*, on the contrary, is the prerogative of some only amongst beings.

(Russell, 1903a, § 427)

Nor is it only in the *Principles* that passages supporting the Meinongian reading are to be found. Later statements of Russell's suggest that the case in favour of his early Meinongianism is incontrovertible:

[Meinong] argued, if you say that the golden mountain does not exist, it is obvious that there is something that you are saying does not exist – namely, the golden mountain; therefore, the golden mountain must subsist in some shadowy Platonic world of being, for otherwise your statement that the golden mountain does not exist would have no meaning. I confess that, until I hit upon the theory of descriptions, this argument seemed to me convincing.

(Russell, 1959, p. 84)

I began this section by charging Quine with carrying the most guilt for portraying Russell's pre-1905 ontological development as arrested. As the passages just quoted show, however, Russell himself is far from innocent

in this respect. Nonetheless, both Quine and Russell are wrong to think that the semantic theory of the *Principles* is committed to a Meinongian ontology. I will argue in the remainder of this chapter that, whether Russell realized it or not, there are ample resources available in the 1903 theory for avoiding Meinongianism. The 1905 theory of descriptions performed many services for Russell that he lacked previously, but contrary to what Quine contends, providing Russell with ‘a means of dispensing with the unwelcome objects’ (Quine, 1966, p. 5) was not one of them. Those objects could already have been eliminated by the 1903 theory.

It should indeed be noted that even if Russell firmly believed the 1903 theory to be committed to Meinongianism, Quine was still mistaken to think that the theory of descriptions was responsible for removing Russell’s belief that he carried that ontological commitment. In Russell’s previously mentioned 1905 paper, ‘The Existential Import of Propositions’, Russell is already free of just the kind of ontological excesses that Quine thinks the theory of descriptions was needed to remove, stating that the denoting phrase ‘the present King of France’ ‘intends to point out an individual yet fails to do so: it does not point out an unreal individual, but no individual at all’ (Russell, 1905b, p. 100), yet this paper was written just *before* the theory of descriptions was discovered and employs a quite different semantic framework for descriptions than that presented in (1905c), the former being reminiscent in its terminology of Frege’s sense/reference distinction. Evidently, therefore, Russell was able to avoid Meinongianism to some extent without the theory of descriptions. Two questions, however, need addressing: (1) Are there substantial differences between the position of Russell’s (1905b) and (1903a)? (2) Are there any special cases which would still commit Russell to Meinongianism, despite his avoidance of a Meinongian present King of France? Candidates for these special cases might be sentences involving empty names (rather than empty descriptions) or sentences asserting the non-existence of their logical subjects. I will argue that the answer to both (1) and (2) is ‘no’. I will start by summarizing the 1903 theory.

2.4 The 1903 theory of denoting

Russell’s treatment of denoting in the *Principles* is a point of departure from the rest of the semantic theory in which it is situated. Central to that semantic theory is the notion of a Russellian proposition, introduced and explored in the previous chapter. Russellian propositions contain the things they are about. In the work of contemporary

Russellians, as mentioned in the last chapter, they are often presented set-theoretically, as sequences of the form $\langle\langle o_1, \dots, o_n \rangle, R \rangle$, where each o_i is an object and R is an n -placed relation (where $n \geq 1$, R being a property in the case where $n = 1$). For example, the proposition that Socrates is mortal is modelled by the ordered pair $\langle \text{Socrates}, \text{mortality} \rangle$. As mentioned in the last chapter, care is needed in order to ensure that this practice does not distort Russell's intention beyond recognition. Russell went to great lengths to distinguish the kind of unity had by a proposition, from that had by a set (and, derivatively, by set-theoretic entities like sequences). Thus it would certainly be a distortion of Russell's view to *identify* propositions with sequences. Nonetheless, there are advantages to *representing* propositions in this way. In particular, the exact constituents of propositions can be made explicit in a way that they are not in the usual linguistic devices by which propositions are picked out (such as by that-clauses, etc.). For example, elements of a sentence expressing a proposition that do not correspond to actual elements of the proposition expressed (such as 'is' in 'Socrates is mortal') are removed. Russell himself equivocated over the question of whether the copula names something present in propositional complexes during the period in question but, as my purpose here is to put the best foot of the 1903 theory forward, I will assume that the theory denies this. Having administered the requisite health warning, I will employ the set-theoretic notation wherever it is useful in what follows.

When it comes to propositions expressed by sentences containing the phrases Russell classifies as 'denoting phrases' (i.e. phrases formed by use of the determiners 'all', 'every', 'any', 'a', 'some' and 'the'),⁵ the attractively simple semantic story just sketched needs revision. Consider the sentence 'Bertie met a man'. Suppose that what makes this sentence true (among other things, perhaps) is that Bertie met Frank. Evidently, the proposition expressed here cannot be the same as the proposition $\langle\langle \text{Bertie}, \text{Frank} \rangle, \text{meeting} \rangle$ as the sentence 'Bertie met a man' could equally be made true by Bertie's meeting Johnny. But $\langle\langle \text{Bertie}, \text{Frank} \rangle, \text{meeting} \rangle \neq \langle\langle \text{Bertie}, \text{Johnny} \rangle, \text{meeting} \rangle$. What is expressed by the sentence containing the indefinite description and the sentence containing the proper name must be different even if they share their truthmaker, and this needs to be reflected in Russell's semantic theory. The same is of course true of the semantic theory of Russell's (1905c). Russell there departs from the theory for singular reference in his treatment of descriptive sentences by assimilating descriptions to quantifiers. In the 1903 theory of denoting, the situation may be thought of, in a way, as reversed: quantifiers are assimilated to denoting concepts.

Rather than taking the man Bertie actually met (Frank) to be the constituent of the proposition that Bertie met a man, Russell introduces special 'denoting concepts' corresponding to each of the previously listed determiners. These denoting concepts, which, following Griffin (1980), I will denote by use slashes '/ ... /', occur as the constituents of the relevant propositions. Thus 'Bertie met a man' expresses the proposition <<Bertie, /a man/ >, meeting>. This proposition does not meet the original criteria for a Russellian proposition, for it no longer contains all of the things it is about. In particular, Frank is not a constituent of the proposition. Rather a concept that *denotes* Frank (or, to be more precise, denotes a 'variable disjunction', one of whose disjoined *denotata* is Frank (see Russell, 1903a: §§ 59–60)), namely the concept /a man/ is. Therefore *denoting*, it is very important to recognize, is not a function carried out by a linguistic expression; it is a function carried out by a *concept* that is expressed by a linguistic expression (a 'denoting phrase').⁶

Turning to the case of sentences containing definite descriptions in grammatical subject position, we encounter an equivalent departure from the simple model. The proposition that the present King of France is bald is not the structure <the present King of France, baldness>, but the structure </the present King of France/, baldness>. Unsurprisingly, one motivation cited for the departure from the simple model is the need to explain the informative quality of some identity statements.⁷ (Surprisingly, Russell does not acknowledge the failure of his semantic theory to explain the same quality of statements containing two proper names.)

As is often the case with Russell's metaphysical manoeuvres, the motivations behind the theory of denoting are as much epistemological as ontological or semantic. An unspoken assumption in the *Principles* is Russell's principle of acquaintance, famously expressed in 'On Denoting' in the form: '[I]n every proposition that we can apprehend ... all the constituents are really entities with which we can have immediate acquaintance' (Russell, 1905c, p. 56).⁸ To understand a proposition, according to Russell, is to be acquainted with its constituents. The propositions expressed by sentences containing denoting phrases pose immediate counter-examples, however: If someone says to me 'I met a man', I understand the proposition expressed by these words, but my understanding does not depend on any acquaintance with the man they met. Similarly, and more pertinent to a work on the foundations of mathematics, I understand the proposition that all natural numbers are mathematical objects but there is no way I can be acquainted with the infinite totality of natural numbers (see Russell, 1903a, §§ 72 & 141). As, by the principle of acquaintance, there must be *something* we are

acquainted with in order to explain our understanding of propositions about the infinite, Russell concluded that special propositional constituents such as denoting concepts must be required.

2.5 Rejecting the Meinongian interpretation (I): empty denoting phrases

If one is determined to see the 1905 theory of descriptions as an exercise in ontological pruning, it seems to give the Meinongian interpretation of the *Principles* ample retrospective backing. Why, after all, would Russell want a means of eliminating the present King of France from his ontology if his previous semantic theory did not impose a commitment to the being of the present King of France? Once the Meinongian reading gains currency on the back of an interpretation of 'On Denoting', the 1903 theory of denoting is likely to be (and indeed, until recently, was) seen as a mere quirk of Russell's early philosophy, demonstrating little more than the immaturity of the quantification theory located in the *Principles*. In other words: lacking the technical wizardry of Frege's quantification theory, Russell's analysis stumbled over general propositions, leading to his baroque (and unnecessary) theory of denoting. By 1905, having learned from Frege, Russell was no longer puzzled by, e.g., the analysis of sentences containing 'all men' or 'a man' or concerning the infinite. Furthermore, he went beyond Frege, seeing how to extend quantificational constructions to accommodate definite descriptions.

On that interpretation, the theory of denoting in the *Principles* is just a symptom of confusion: confusion easily corrected by a Fregean quantification theory. Now it may well be that the 1903 theory is confused. As I have already acknowledged it is certainly inferior in many respects to the 1905 theory. But confusion and inferiority are beside the point here: neither failing is sufficient to suggest that the 1903 theory is committed to Meinongianism.

The problem with the Meinongian interpretation, as can be seen either from a fairly quick examination of relevant passages from the *Principles*, or from simply reflecting on the mechanics of the early theory of denoting, is that it ignores the resources for avoiding Meinongianism made available by the 1903 theory of denoting. One can see how the unmodified theory of Russellian propositions invites Meinongianism when faced by names of non-existents. The simple model treats the semantic value of a singular term as its bearer. Assuming '*a*' to be a singular term, this demands that *a* must be something in order for '*Fa*' to be significant: *a* must be a constituent of $\langle a, F \rangle$, and thus must have

(at the very least) a kind of *being*. In the case of, say, a proposition about the present King of France, however, the situation is quite different once we implement the modifications to the simple model that we have just outlined for propositions containing denoting concepts. In the proposition that the present King of France is bald, the Present King of France is not to be found, only the denoting concept /the present King of France/ is present in his place. But, in this case, the argument previously taken to ensure the being of *a* will only, when transposed to this case, ensure the being of the *concept* /the present King of France/, it will not ensure the being of a Meinongian entity identical with the present King of France. In short, the argument for Meinongian entities, as given thus far, is not an argument for accepting that the present King of France is numbered among Meinongian objects. For once we admit denoting concepts, all that is required is to allow for cases where some concepts do not denote in order to avoid Meinongianism (for those cases).

Those determined to maintain a Meinongian reading of the *Principles* will perhaps insist that while the theory of denoting has this consequence, it does not mean that Russell recognized it. This objection can be answered easily enough, however, as there are places in the *Principles* where Russell not only recognizes that the existence of a denoting concept does not ensure any being for its putative denotation, but also makes use of this very fact in explaining otherwise paradoxical features of denoting. Consider Russell's apparently paradoxical insistence that 'in some sense nothing is something' (Russell, 1903a, § 73) – a claim which is often mistakenly taken as evidence for an unrestrained Meinongianism in the *Principles*. In fact, Russell escapes both a Meinongian commitment to something called 'nothing', and dispels the air of paradox around the claim, by utilising the same resources of the theory of denoting just demonstrated:

We may now reconsider the proposition 'nothing is not nothing' – a proposition plainly true, and yet, unless carefully handled, a source of apparently hopeless antinomies. *Nothing* is a denoting concept, which denotes nothing. The concept which denotes is of course not nothing, *i.e.*, it is not denoted by itself. The proposition which looks so paradoxical means no more than this: *Nothing*, the denoting concept, is not nothing, *i.e.*, is not what itself denotes.

(*ibid.*, § 73)

Here it is perfectly clear that Russell only holds the denoting concept, not its denotation, as necessarily possessed of being. Evidently, what

goes for one non-existent denotation of a denoting concept also goes for another. If /nothing/ need not denote something, /the present King of France/ need not either. Indeed, in § 73, Russell clearly states the conditions under which a denoting concept fails to denote anything. Let '*det*' stand for any of the aforementioned determiners which are annexed to a class-concept expression to indicate a denoting concept. A denoting concept /*det*(F)/ fails to denote anything just in case there are no values of the propositional function $F(x)$ which are true (see *ibid.*), i.e., just in case there are no Fs.

Over the last decade, as attention has been increasingly drawn to these and similar considerations by, among others, Peter Hylton (1990, 2003), Nicholas Griffin (1996), Harold Noonan (1996), Gideon Makin (2000), and Stewart Candlish (2007), the Quinean take on Russell has been firmly discredited. However, the Meinongian interpretation is not so easily rejected. Before concluding that Russell was wholly free of Meinongianism in 1903, we must address the two problem cases specified earlier: propositions containing empty proper names, and propositions asserting the non-existence of their logical subjects. I respond to these challenges in turn in the next two sections.

2.6 Rejecting the Meinongian interpretation (II): empty proper names

We saw above that the argument from *a*'s occurrence in the proposition $\langle a, F \rangle$ to the necessary being of *a* does not transpose to an argument for the necessary being of the denotation of /the F/ from its occurrence in $\langle \text{the } F, G \rangle$. Even those, like Makin (2000), who have been influential in demonstrating that this exposes the Meinongian interpretation of Russell's theory of *denoting* as misguided, however, do not think that the issue of the alleged Meinongianism of the *total* semantic theory of the *Principles* is thereby resolved. As Makin (*ibid.*, pp. 61–66) points out, we have shown that Russell need not automatically accept the existence, or being, of the present King of France or of the alleged denotations of denoting concepts in general. We seem, nonetheless, to be left with Meinongian objects as the shadowy referents of empty proper names. The meanings of proper names are nowhere in the *Principles* taken to be denoting concepts. Thus it looks as if Russell's Meinongianism is unflinching when it comes to empty names.

An apparently obvious, yet nonetheless regularly overlooked, point is worth noting here: the 1905 theory of descriptions is in just the same situation as the early theory of denoting on this point. The theory of

descriptions alone is powerless to dispose of the unwanted referents of proper names. Only when the theory is coupled with a wholly independent doctrine, namely that proper names are disguised descriptions, can we avail ourselves of the theory of descriptions in order to purge our ontology of the things named by empty proper names.⁹

The Nominal-Meinongian interpretation, as I shall call the interpretation of Russell as being committed to Meinongianism solely for proper names, while not inconsistent with the traditional Quinean interpretation, does not make for a happy modification of it. The conjunction of the Nominal-Meinongian interpretation and the Quinean view of the theory of descriptions as an exercise in ontological pruning offers an unflattering explanation of the motivations behind the development of the theory of descriptions. Brilliant though the theory may be, and central though it may have been to Russell's subsequent philosophical development, the original goal of the theory was deeply misguided if the conjoined interpretation is correct. According to a Nominal-Meinongian modification of the traditional reading, much of the effort expended by Russell on discovering the theory was unnecessary. The ontological cutbacks made by the theory require, as noted above, the addition of the description theory of proper names, and therefore do not require the theory of descriptions (as opposed to the theory of denoting) at all.

It is unsurprising, therefore, that the Nominal-Meinongian reading invariably rejects the traditional interpretation of the theory of descriptions as nothing more than a tool for making ontological cutbacks. In my view, it is right to do so. Notice, however, that the interpretation is forced at this point to make a departure from the face-value interpretation of Russell's autobiographical comments.¹⁰ In doing so, their licence to appeal to those comments in defending their interpretation ought to be revoked. If, as all who reject the traditional Meinongian reading of the *Principles* must agree, a careful examination of the treatment of denoting in the *Principles* reveals that the interpretation inherited from Quine is insupportable, then Russell's own later comments lending support to the traditional interpretation must be viewed with suspicion. Russell's memory, in other words, should not be turned to for a decision between outright rejection and nominal retention of the Meinongian reading.

The fallibility of Russell's memory during the later years of his life is not an uncommon obstacle to understanding his changing views. The remarks made in the *Principles* itself, however, cannot be put aside in the same fashion. If the last remnants of Russell's alleged Meinongianism

are to be purged from our understanding of his philosophy, a convincing account of what is going on in the passages appealed to in establishing a Nominal-Meinongian reading is urgently called for.

In fact, accounting for those passages in a way that is at least as convincing as the Nominal-Meinongian reading is not as hard as it may seem when considering the passages in isolation. Russell's views were undergoing rapid changes when he wrote the part of the *Principles* dealing with denoting, as an examination of his unpublished writings from the periods directly before and after reveal. The discussions of denoting, and of the problems raised by denoting phrases, did not begin to occupy Russell until quite late on in the writing of the *Principles*. The first discussion of the topic is in a draft of May 1901, and some of the most important innovations in Russell's treatment of denoting do not appear until the finished version of the book. Russell returned to the topic again shortly after the book was completed. From late 1903 to the completion of 'On Denoting' in the summer of 1905, Russell worked tirelessly on the problems of denoting and his views developed with remarkable speed. Accordingly, it distorts the true situation when the position stated in the *Principles* is characterized as a fixed doctrinal point in Russell's philosophy. Russell's analysis of denoting was in a state of almost constant flux during the period in question – including the period when the chapter on denoting in the *Principles* was written. The view stated in the *Principles* is thus no more complete, nor permanent, than any other view expressed in the long line of evolution of his thinking on the topic before he finally settled on the theory given in 'On Denoting'. Viewed out of this context, passages like that from § 427 of the *Principles* quoted earlier look like firm statements of allegiance to grotesque ontological commitments. Returned to the wider context, however, they do not command the same significance. Nonetheless, the Nominal-Meinongian is apt to reply, taken as a time-slice, no matter how slender, of Russell's ontological development, the *Principles* looks to capture a period when Russell thought Meinongian objects were the referents of empty names. If this is the case, however, the time-slice captures a remarkable aberration in Russell's thought.

Though denoting concepts were a late addition to Russell's ontology, arriving only in fairly late drafts of the *Principles*, they were not without ancestors. As Griffin (1996, pp. 35–37) points out, the abandoned 1898 manuscript 'An Analysis of Mathematical Reasoning' partly anticipates the later notion of a denoting concept in its introduction of what Russell calls 'contents'. In particular, certain contents share the defining feature later attributed to denoting concepts, namely the ability

to be constituents of Russellian propositions that occupy the position usually reserved for subjects in complexes without being their actual logical subjects. In short, they have the ability to stand proxy for the logical subjects of propositions in just the same way that denoting concepts do (see Russell, 1898, pp. 176–177). Russell also maintains a version of the distinction drawn in the *Principles* between occurrence as meaning and occurrence as subject in a proposition (see *ibid.* p. 174). Some contents – namely predicates which Russell takes to form a proper subset of the set of contents – Russell thought in the ‘Analysis’ can only occur as meanings, not as subjects. This view was retracted in (1903a), as Russell came to believe that the notion of a propositional constituent that cannot be made into a logical subject was self-contradictory (see Russell 1903a, § 49 & Appendix A). By this time, the notion of contents had been abandoned, and what Russell formerly called ‘predicates’ were now numbered among concepts. The important point to note is that concepts can occur as both meaning and as subject. There is nothing in Russell’s semantic system to stop one from extending the same privileges to denoting concepts. In time, as we shall now see, just such an extension was used by Russell to avoid a commitment to Meinongian entities as the referents of empty names.

It is not clear from Russell’s discussions in the *Principles* whether he thinks at this time that denoting concepts occur as meanings in propositions in the same way that non-denoting concepts do in predications. One reason for suspecting that Russell thinks that denoting concepts are indeed meanings is that the view is explicitly stated in manuscripts written shortly after the *Principles*. For example, in the 1903 manuscript ‘On the Meaning and Denotation of Phrases’, Russell writes: ‘[a] proper name, such as *Arthur Balfour*, is destitute of *meaning*, but *denotes* an individual. On the other hand, verbs and adjectives have meaning but no denotation’ (Russell, 1903b, p. 284). It is around this time that Russell first explicitly appeals to the distinction to account for empty names. Noting that the above theory seems to force Meinongian objects on us in the case of empty proper names, Russell immediately takes this to expose a flaw in the theory, rather than accepting Nominal-Meinongianism: ‘We decided that proper names – of which *Apollo* appears to be one – have only denotation, not meaning; but in the present case, the name denotes nothing, since *Apollo* is a figment’ (*ibid.*, p. 285). The conclusion Russell draws is that ‘imaginary proper names are really substitutes for descriptions’ (*ibid.*). There is still a great distance between this view and that of ‘On Denoting’, however. Indeed, in opposition to the claim in ‘On Denoting’ that definite descriptions

are meaningless in isolation, Russell appeals to their meaningfulness as a premise in his argument:

The phrases we are concerned with are those formed by putting *the* before a concept of which there are no instances, e.g. 'the present King of France'. It is impossible to deny *meaning* to this phrase; it has just distinct a meaning as 'the present King of England'. But unlike this latter phrase, it denotes nothing.

(*ibid.*, pp. 285–286)

Furthermore, Russell, as he did in the *Principles*, continues to see a close connection between denoting concepts and concepts more generally: 'The concept "the instance of *a*" always is a meaning; but what this meaning would denote, if it denoted, is often wholly lacking' (*ibid.*, p. 286).

It has been widely recognized that these passages are evidence that Russell was toying with the Fregean distinction between sense and reference during this period.¹¹ Undoubtedly, this is so. But placing too great an emphasis on the role of Frege in these discussions disguises the fact that Russell had already developed a sophisticated distinction between meanings and denotations of his own to play with.

Of course, the fact still remains that the innovation that frees Russell from taking every proper name to denote an object here is the interpretation of some names as disguised descriptions. There is, however, another important feature that comes out of the above exegesis: denoting concepts, though they do not occur as predicates in propositions, do occur *as* concepts. What this means is that there are some propositions composed *entirely* of meanings: in </the present King of France/, baldness> every constituent occurs as meaning, not as logical subject (the logical subject is the present King of France, not /the present King of France/). All that Russell does in the 1903 manuscripts is to extend this same approach to propositions like the proposition that Apollo is fair, which will now contain a constituent, /Apollo/, in place of the non-existent Apollo, giving us </Apollo/, fairness>. In order to remain consistent with the general principle that *proper* names refer, Russell is required to deny that 'Apollo' is a *genuine* proper name, but the most important element of Russell's position is that the thing occupying subject position in a proposition can occur as meaning, not as entity. This was already the case for propositions of the form </the F/, G> in the *Principles*. All that is needed to dispose of Nominal-Meinongianism is the realization that this treatment of empty descriptions can be

extended to empty names as well. Hence, the ontology of the *Principles* ought no more to open its doors to Homeric gods than to the denotation of the denoting concept *nothing*. The meanings /Apollo/ and /the present King of France/ have being, but Apollo and the present King of France do not. This is no more Meinongian than the position advocated in 'On Denoting', which takes the property of presently being King of France to be the property attributed to a unique bald value of the variable 'x' in the correct analysis of the proposition that the present King of France is bald. This correct analysis regards the proposition as having the logical form of ' $\exists x((Fx \ \& \ \forall y(Fy \supset x = y)) \ \& \ Gx)$ ', but does not thereby incur ontological commitment to any value of 'x'.¹²

Whatever traces of Meinongianism are to be found in the *Principles*, they are nothing more than a temporary aberration in the line of Russell's development stretching from his theory of contents in 1898 to the mature version of that theory in 1903, and should accordingly be credited with little if any significance in Russell's ontological development.¹³

2.7 Rejecting the Meinongian interpretation (III): denying existence

One issue remains outstanding. The case of true denials of existence cuts across the distinction between names and descriptions. With the Nominal-Meinongian interpretation dealt with, these cases are the last obstacle faced by the anti-Meinongian interpretation. According to a face-value interpretation of certain passages of the *Principles*, a proposition denying the existence of an entity *a* can only be true if there is something which the proposition is about and is true of. Thus, so long as *a* is non-existent, it seems to be guaranteed being if it is asserted by anyone to be non-existent.

A number of passages in the *Principles* support this interpretation. Most of the passages offering the strongest support are located in the direct discussion of the distinction between being and existence at § 427. One of the most forthright passages from § 427 apparently endorsing an unavoidable Meinongianism was quoted near the beginning of this paper. It is not the only passage in that section offering substantial support for the Meinongian interpretation, however, as the following passages show:

Being is that which belongs to every conceivable term, to every possible object of thought – in short to everything that can possibly

occur in a proposition, true or false, and to all such propositions themselves ... 'A is not' must always be either false or meaningless. For if A were nothing, it could not be said to be; 'A is not' implies that there is a term A whose being is denied, and hence that A is. Thus unless 'A is not' be an empty sound, it must be false – whatever A may be, it certainly is ... For what does not exist must be something, or it would be meaningless to deny its existence; and hence we need the concept of being, as that which belongs even to the non-existent.

(Russell, 1903a, § 427)

How should these passages be responded to if a Meinongian reading of the *Principles* is to be resisted? The first thing to note is that there is a tension arising between these passages and the discussion of the concept of *nothing* at § 73. Russell points out cases there where he thinks it is obvious that a concept may fail to denote something (and thus, presumably, evade commitment to the being of what it appears to denote): 'a concept may denote although it does not denote anything ... when there are propositions in which the said concept occurs, and which are not about the said concept, but all such propositions are false' (ibid., § 73).¹⁴ After some further clarification, Russell suggests as an example, a proposition about chimaeras, (rather than about the concept *chimaera*).¹⁵ This proposition, he insists, contains a concept that fails to denote. Admittedly, his approach here is somewhat complicated by his decision to treat the proposition in question (that chimaeras are animals) as a universal generalization (what Russell, following Peano, called a 'formal' – as opposed to 'material' implication). This reduces the proposition to the trivial truth expressed by ' $\forall x(x \text{ is a chimaera} \supset x \text{ is an animal})$ '.¹⁶ The false antecedent guarantees the truth of the proposition here expressed on the classical semantics for ' \supset ' employed by Russell. But the important point to note is that the antecedent *is* recognized by him as false. This is ensured by the definition of a denoting concept that fails to denote given in this crucial section of the *Principles*: 'All denoting concepts, as we saw, are derived from class-concepts; and *a* is a class-concept when "*x* is an *a*" is a propositional function. The denoting concepts associated with *a* will not denote anything when and only when "*x* is an *a*" is false for all values of *x*' (ibid.).

In light of this clear statement of the conditions under which denoting concepts fail to denote, it is evident that a Meinongian interpretation of § 427 cannot be accepted without thereby attributing (at best) confusion, or (at worst) inconsistency to the book as a whole. For Russell

has now supplied us with a clear instance of something that can be substituted for *A* in the passages quoted from § 427 that provides the counter-example to his claim that “‘*A* is not’ must always be either false or meaningless’ (ibid., § 427), namely the case where *A* is a denoting concept expressed by annexing a determiner to a class-concept expression for which the class in question is empty.¹⁷

This point also casts doubt on Levine (2001)’s interpretation of the 1903 theory. According to him (p. 92), reference failure troubled Russell because it raised the unwelcome spectre of truth-value gaps. Levine thinks that the theory of denoting concepts is insufficient to provide truth-values to sentences containing empty denoting phrases. According to the interpretation I have just offered, however, this is not so. Admittedly, there must be a constituent in the subject position of a Russellian proposition if it is to have a truth-value, but there *is* something in the position of a Russellian proposition expressed by a sentence containing an empty denoting phrase, namely an empty denoting *concept*. Furthermore, the truth-value of the proposition may be determined, at least in part, by whether or not the denoting concept is empty. As we saw in the case of Russell’s discussion of the denoting concept *nothing*, he is quite willing to assign truth-values to propositions containing denoting concepts that do not denote anything. Levine’s interpretation might hold if, like Frege, Russell took the semantic values of sentences to be truth-values, which were values of functions from objects. For without the relevant object, it is unclear how a truth-value can be reached (hence Frege’s belief that natural language sentences containing empty names lack truth-values), but Russell’s semantic theory is quite different. The semantic values of sentences are propositions, and we have just seen how the theory of denoting can ensure constituents and truth-values for propositions in these kinds of cases.

Levine has expanded his argument in his (2005). The key premise in his argument there is that Russell is committed to the following principle in the *Principles*:

(Ab1) A sentence that fails to be about any entity fails to be either true or false.

(Levine, 2005: 4)

Russell’s adherence to (Ab1) is crucial to the development of his argument in ‘On Denoting’, according to Levine’s interpretation, because, when coupled with the view that definite descriptions have

the semantic profile of singular terms,¹⁸ it commits one to the following principle:

(Ab*1) If a phrase of the form 'the F' fails to denote any entity, then a corresponding sentence of the form 'The F is G' fails to express a proposition that is either true or false.

(ibid.: 12)

As (Ab*1) is clearly one of the views Russell intends to refute in 'On Denoting', he must reject either (Ab1) or the view that definites behave like singular terms. The latter assumption, of course, is the one that Levine takes him to be rejecting in 'On Denoting'.

While I certainly do not doubt that Russell is at pains to show that definite descriptions do not share the semantic profile of singular terms in 'On Denoting', I do not share Levine's confidence that we can attribute (Ab1) to Russell in 1903. Levine's justification for attributing (Ab1) to Russell comes from the following passage from the *Principles*:

We may say, broadly, that every proposition may be divided, some in only one way, some in several ways, into a term (the subject) and something which is said about the subject, which something I shall call the assertion. Thus 'Socrates is a man' may be divided into Socrates and is a man. The verb, which is the distinguishing mark of propositions, remains with the assertion; but the assertion itself, being robbed of its subject, is neither true nor false.

(Russell, 1903a § 43)

This passage does not entail (Ab1). The context of the passage is a discussion of the constituents of propositions. The main point that Russell is making here is that the division of propositions into terms and assertions is superior to their division into subjects and predicates because it has greater success in accommodating the unity of the proposition, by preserving the status of the verb as a unifying element. The claim that an assertion 'robbed of its subject' is neither true nor false is a claim that assertions, like propositional functions, are not propositions. I read the passage, therefore, as emphasising that assertions are not complete propositions, not as a comment on the semantics of propositions about non-existents. If Levine's interpretation is to be convincing, stronger evidence from the *Principles* than this is needed, I think. In particular, it will require evidence that Russell is committed to the view that a proposition containing a non-denoting denoting concept in subject position

is not about anything. This is the thesis that I am denying Russell is committed to in 1903, as I maintain that the theory of denoting concepts allows propositions to be about non-existing things.

In the remainder of this section, I will attempt to support this claim by sketching out a semantic theory for denoting phrases that respects Russell's claim that such phrases have unitary semantic values that are the constituents of the propositions expressed by sentences containing denoting phrases. Inevitably, such an attempt will be anachronistic and hence diverge from Russell's own position in places. The following is not intended to be an interpretation of any formal semantic theory in the *Principles* – none will be found there – nor is it even intended to be a formal rendition of the informal semantic theory that is found there. My intention is purely to demonstrate that Russell's insistence that quantifier phrases have a unitary semantic value, independently of whatever things they (or, as Russell prefers, their values) actually denote does not prohibit sentences containing empty denoting phrases from determinately expressing either truths or falsehoods. Furthermore, as we shall see, just such an approach has been shown in recent years to have a number of advantages over the classical analysis of the quantifiers exemplified in the 1905 theory of descriptions when it comes to the analysis of quantified noun-phrases in natural language semantics.

One way to make sense of such an approach from a formal perspective, suggested by recent work in linguistics on natural language quantification, is to interpret denoting concepts as particular kinds of sets. For example, we can interpret /all *F*s/ as the set of all sets that contain the set of *F*s as a subset:

$$\text{/all } F\text{s/} = \{X \subseteq U: \{x: Fx\} \subseteq X\} \quad \text{Df.}$$

This defines /all *F*s/ as the set of sets *X* that are a subset of the domain *U* such that the set of *F*s is a subset of *X*. This set-theoretic object is a 'generalized quantifier'.¹⁹ Each item on Russell's list of denoting phrases can be easily interpreted as a generalized quantifier:

$$\text{/no } F\text{s/} = \{X \subseteq U: \{x: Fx\} \cap X = \emptyset\} \quad \text{Df.}$$

$$\text{/some } F\text{s/} = \{X \subseteq U: \{x: Fx\} \cap X \neq \emptyset\} \quad \text{Df.}$$

$$\text{/the } F\text{/} = \{X \subseteq U: \text{for some } u \in U, \{x: Fx\} = \{u\} \text{ and } u \in X\} \quad \text{Df.}$$

The denoting concept /the *F*/ is here defined as the set of sets *X* such that the set of *F*s is a singleton and *X* contains the only member of the set of *F*s. If, as Russell decided to do in 1905, we wanted to assimilate

indefinite descriptions to existential quantifiers, /an *F*/ will be identical with /some *Fs*/. If, as he thought in 1903, the phrase 'an *F*' implies a singularity lacking in 'some *Fs*', this can be captured by the following definition:

/an *F*/ = { $X \subseteq U$: $\{x: Fx\} \cap X$ contains exactly one member} Df.

Generalized quantifiers have a number of features that make them preferable to the more familiar variable-binding quantifiers of classical predicate logic when interpreting natural language quantifiers. For one thing, they do not depart drastically from the syntax of e.g. English in the way that the classical quantifiers do: quantified (that is, in Russell's terminology, *denoting*) phrases are assigned abstract objects as values and are thus treated as complete units both syntactically and semantically. In addition, determiner phrases can be defined independently of the nouns they are combined with to form denoting phrases by treating them as functions from sets of individuals to generalized quantifiers. For example, the semantic value of 'every' is that function which when applied to any set of things *A*, has as its value the set of sets containing *A*. This is particularly desirable in light of the well recognized *compositionality* of natural languages: the meanings of sentences are functions of their parts in the same way that sentences are functions of their syntactic parts, and this is *prima facie* a good empirical reason to expect an isomorphism between syntactic and semantic structure. If the quantifiers are interpreted classically, the only way to find a semantic unit corresponding to the syntactic unit of the relevant noun phrase is by first translating the object-language into a formal calculus containing rules for lambda-abstraction and then employing the lambda operator to convert a formula like ' $\forall x Fx$ ' into the lambda-expression ' $\lambda P [\forall x [Fx \supset Px]]$ '. This preserves a compositional semantics for the object-language but does so in an *ad hoc* way, appealing to a translation which is syntactically far more complex than the object-language expression it translates, and which obscures the compositionality of the denoting phrase in question. An additional advantage of the generalized quantifier analysis is its natural extension to other noun phrases that are most naturally construed as quantifiers, yet elude definition in terms of the classical (i.e. universal and existential) quantifiers. For example, 'most *Fs*', 'many *Fs*', 'more than five *Fs*', 'more than five but fewer than eleven *Fs*', are all readily amenable to analysis as generalized quantifiers.

All of this suggests that an analysis of quantified noun-phrases as distinct semantic units, such as Russell offers in 1903 (as opposed to the

analysis of them as ‘incomplete symbols’ offered in 1905), has much more to commend it than the historical assessment of Russell’s semantic development credits it with. What Russell would have thought of the identification of denoting concepts with sets of sets is a question confined to the realms of speculation. Certainly, as his attitude towards classes veered towards agnosticism, he would not have looked kindly on the proposal. But, by that time, he had already adopted the theory of descriptions anyway. I see nothing essential to the philosophical system of the *Principles* that is incompatible with the interpretation of denoting concepts as generalized quantifiers.

The phenomenon of scope ambiguity must also be explained if the theory of denoting is to be taken seriously as a theory of natural language denoting phrases. It is usually assumed that scope interactions between quantifiers and other expressions cannot be explained by Russell’s 1903 theory, partly because the 1905 theory is taken as the definitive word on the matter. This assumption is challenged by Dau (1986), though his approach relies on attributing the same formal resources of classical quantification theory to Russell in 1903 as he employs in 1905. This is not the only option, however. It is possible to take scope to be a semantic phenomenon, and then account for it by more complex semantic rules.²⁰ Assuming the more common interpretation of scope as a syntactic phenomenon, a level of abstract syntactic representation such as the LF-structures postulated by the syntactic theories of Chomsky and his followers must be located. Semantic analysis of natural language sentences will then be carried out relative to a specific LF representation, and many sentences may be ambiguous between two or more LFs and thus two or more sets of truth-conditions. On this approach, the semantic benefits of generalized quantifiers and the syntactic benefits of Government and Binding theory are both required. There is, as Neale (1993a) has argued, no reason why the theory of descriptions cannot be construed as a theory of LF structure. Thus, it is entirely feasible that Russell’s *two* theories of denoting can be fruitfully coupled – the 1903 semantic theory with the 1905 syntactic theory. Such a move will require a reformatting of the syntax of Russell’s formal language to bring it in line with the structure of natural language quantifier phrases. We will see a way of doing this in Chapter 4.

One potential difficulty for the proposed interpretation of Russell’s 1903 theory comes from his treatment of the concept of existence. Unlike Frege, who identified the expression ‘existence’ as an expression of what he deemed to be a second-level concept, the existential quantifier, Russell assumes – both in the *Principles* and in ‘On Denoting’ –

that existence (when used in philosophy, rather than in symbolic logic) is a predicate.²¹ This complicates things. Consider what happens to the truth-conditions of 'the present King of France exists' on this assumption:

'The present King of France exists' is true iff:

$\{x: x \text{ exists}\} \in \{X \subseteq U: \text{for some } u \in U, \{x: x \text{ is presently King of France}\} = \{u\} \text{ and } u \in X\}.$

As the set of existing things is not contained in the set of those sets which contain the unique thing having the property of being presently King of France, the proposition 'the present King of France exists' is, as we desire, false.²² But now consider the case of its negation:

'The present King of France does not exist' is true iff:

$\{x: x \text{ does not exist}\} \in \{X \subseteq U: \text{for some } u \in U, \{x: x \text{ is presently King of France}\} = \{u\} \text{ and } u \in X\}.$

On the assumption that Meinongianism is false, and thus that U contains only what exists, $\{x: x \text{ does not exist}\}$ is \emptyset . But, of course, \emptyset does not contain a unique thing having the property of being presently King of France either. Thus 'the present King of France does not exist' is also false, and this is certainly not what we desire. It may be possible to rework things by presenting distinct rules for negation and keeping the above truth-conditions only for sentences that contain no logical operators. Thus, 'the present King of France does not exist' will be true iff 'the present King of France exists' is false, by virtue of a recursive clause for the negation operator. However, this seems to be complicating matters unnecessarily. A better strategy is to interpret Russell more charitably on the interpretation of 'existence'.

In a number of places, both in the *Principles* and in articles written around the time of 'On Denoting', Russell draws a distinction, mentioned earlier in this paper, between the uses of 'existence' in logic and in philosophy. The term 'being' is often employed by him to help with disambiguating the two senses. Logicians and mathematicians talk of a class 'existing' when it has elements. This is to be contrasted with the philosophical sense, exemplified in statements such as 'God exists'. Classes do not have existence in this latter sense, says Russell, but they do have being. Russell suggests in (1905b) that the conflation of the two senses arises because often existence in the everyday sense would be required for existence in the logician's sense. For example, 'no unicorns

exist' denies the existence of unicorns in both senses. This suggests that the logician's notion of existence encompasses the everyday sense but not vice versa: the set of things that exist in the everyday sense exist in the logician's sense. Abstract objects do not exist in the everyday sense; hence the everyday sense does not exhaust the logician's sense. If we are attempting a semantic evaluation of a non-logico-mathematical sentence, however, no harm will come from taking the assertion of the existence of *Fs* to be an assertion of the non-emptiness of the class of *Fs*. Construed this way, the truth-conditions of 'no *Fs* exist' and 'the *F* does not exist' can be brought in line with those assumed by the standard interpretation of negative existentials. This is, of course, a departure from Russell's view. But note that it is not a departure from his theory of denoting; it is, rather, an extension of it, as all that we have done is insist that 'exists' is (or is a part of) a quantifier, not a predicate.

Having avoided the difficulties of negative existentials like 'the Golden Mountain does not exist', we are now left with the cases that Russell insists can never be true, namely those that deny *being*:

Being belongs to whatever can be counted. If *A* be any term that can be counted as one, it is plain that *A* is something, and therefore that *A* is. '*A* is not' must always be either false or meaningless. For if *A* were nothing, it could not be said not to be; '*A* is not' implies that there is a term *A* whose being is denied, and hence that *A* is. Thus unless '*A* is not' be an empty sound, it must be false – whatever *A* may be, it certainly is.

(Russell, 1903a § 427)

Far from posing an insurmountable obstacle to a non-Meinongian interpretation, this passage is perfectly consistent with the semantic theory I have sketched. Russell's point in these passages is simply that every denoting phrase, indeed, every *word*, has a semantic value. This is ensured for denoting phrases on the theory of generalized quantifiers. It could be even extended to names. A name '*a*' can be assigned, not the entity *a*, but the set of sets to which that entity belongs, i.e. $\{X \subseteq U: a \in X\}$ which, in the case where *a* does not exist, will be \emptyset . Thus we can extend the semantics of generalized quantifiers to ensure a semantic value for all expressions, conforming neatly with Russell's insistence that '*Words* all have meaning in the simple sense that they are symbols which stand for something other than themselves' (ibid., § 51). The apparent paradox in Russell's remark at § 427 just quoted does not need, therefore, to be explained by a Meinongian interpretation.

A better explanation is that Russell, neither for the first nor for the only time, is mixing modes of speech, talking about the semantics of an object language without the usual employment of a metalanguage in which to do so, in a way we would now demand in order to avoid such confusing results as are apparent here. Russell's sloppiness disguises his claims about denoting concepts as claims about their denotations (if they have them). Such sloppiness is not Meinongianism.

On the interpretation of the passages quoted from Russell (1903a § 427) I am urging, they are best understood as observations about what kinds of status the constituents of propositions have. In other words, we should take seriously Russell's claim that *being* belongs 'in short to everything that can possibly occur in a proposition' (ibid.). If we do so, we will arrive back at the same position we reached at the end of the previous section: it is the denoting concepts occurring in propositions that must have being, *not their alleged denotations*. Denoting concepts thus form a watertight barrier between Russell's 1903 theory of meaning and the Meinongian ontology attributed to him.

2.8 Conclusion

I have argued in this chapter that Russell's 1903 semantic theory does not entail any form of Meinognianism. Unlike other rejections of the Quinean interpretation of Russell's ontological development, I have refused to permit even a residual degree of Meinongianism, of the kind usually reserved for the semantics of proper names or true denials of existence. To the extent that Russell attributed Meinongianism to himself, I have also maintained that those attributions are mistaken. However, this chapter remains neutral on the precise historical/biographical details: I have deliberately left it open as to whether Russell's apparent later statements of Meinongianism can be put down to inaccuracies of his memory or down to a failure on his part to fully recognize the theoretical resources available to him in the *Principles*. Whatever the answer to that historical/biographical question, however, the story inherited from Quine of the origins of the theory of descriptions must be rejected. For we have seen that Russell certainly did recognize and employ the resources available to him for avoiding Meinongianism before he discovered the theory of descriptions (in e.g. 'On the Meaning and Denotation of Phrases' and, later, 'The Existential Import of Propositions'). Few people would disagree with Quine that 'On Denoting' was one of Russell's most important contributions to philosophy; but the interpretation of it as an attack on the supposedly

'unrestrained' ontology of the *Principles* is simply false. Even worse than the falsity of the interpretation is the resulting caricature of the 1903 theory of denoting as a product of confusion and naivety. On the contrary, this theory of denoting has much to commend it, and, as we have seen, it has many advantages over the 1905 theory of descriptions when it comes to the analysis of natural language quantifiers. Unfortunately for Russell, however, the resources we have employed here to reveal these benefits – generalized quantifier theory in particular – were unavailable to him in 1903. His own interpretation of denoting concepts was not a set-theoretic one, but one that treated denoting concepts as intensional entities akin to Fregean senses. In 1905, after lengthy study of the concept of denoting, he arrived at an argument that convinced him that entities of that sort can have no place in a coherent theory of denoting. In response he produced the theory of descriptions contained in 'On Denoting'. This turn of events turned out to be remarkably fortuitous for him in terms of its beneficial impact on his wider concerns in philosophical logic. The impact of the theory of descriptions, and the argument that led Russell to it, will be examined in the next chapter.

3

History II: ‘On Denoting’ and the Genesis of the Theory of Descriptions

3.1 The theory of descriptions and the theory of types

If the Meinongian interpretation of the *Principles* is to be rejected as the motivation behind Russell’s adoption of his 1905 theory, what account can we give in its place to explain why Russell abandoned the earlier theory for the later one? We know that Russell’s main concern during the period between the completion of the *Principles* and the writing of *Principia* was the contradiction and its relations. It is certainly not implausible, therefore, to speculate that this concern played some role in motivating the theory of descriptions.

Turning to Russell’s own writings, we find plenty of support for this view. In the first volume of Russell’s autobiography, he describes the theory of descriptions as ‘the first step towards overcoming the difficulties that baffled me for so long’ (Russell, 1967: 152). Little more is given by way of explanation there, which is understandable in the context of a book whose audience was probably not primarily composed of logicians. In an autobiographical piece written specifically for a philosophical audience some time before, however, Russell provides more detail that lends support for the claim:

What was of importance in this theory was the discovery that, in analysing a significant sentence, one must not assume that each separate word or phrase has significance on its own account. ‘The golden mountain’ can be part of a significant sentence, but is not significant in isolation. It soon appeared that class-symbols could be treated like descriptions, i.e., as non-significant parts of significant

sentences. This made it possible to see, in a general way, how a solution of the contradictions might be possible.

(Russell, 1944, pp. 13–14)

We have seen in the previous section the dangers of an unquestioning trust in Russell's later memory of events early on in his philosophical career. However, turning to his writings from the time in question, we find some striking remarks that further confirm the connection between the theory of descriptions and the solution to the contradiction. Decisive evidence that Russell saw a connection between the theory and the contradiction at the time of developing the theory of descriptions comes from a letter dated April 14, 1904, in which Russell wrote to his wife that he and Whitehead 'had a happy hour yesterday, when we thought that the present King of France had solved the Contradiction; but it turned out finally that the royal intellect was not quite up to that standard. However, we made a distinct advantage' (Russell 1992: 269).

What, then, is the connection between the theory of descriptions and the solution to the contradictions? As is hinted by the 1944 passage just quoted, the connection is that Russell's 'no-classes' theory has its origins in the theory of descriptions. To some extent this is visible from a careful study of *Principia Mathematica*, once one knows what to look for. *Principia* officially forwards a 'no-classes' theory, the justification for which is that symbols for classes are contextually eliminable by appeal to a cluster of contextual definitions at *20, the most important of which is (in more modern notation rather than that employed in the original):¹

$$*20.01 \quad f\{z: \psi z\} =_{\text{df}} (\exists \phi)(\forall x)((\phi!x \equiv \psi x) \wedge f\{\phi!\hat{z}\})$$

Because no class symbol occurs in the definiens, *20.01 provides a means of eliminating an occurrence of a class symbol C within a propositional context $f(C)$. Thus *20.01 licenses the use of class symbols without any ontological commitment to classes, on the grounds that the use of class symbols is always dispensable. In the philosophical introduction to the work, the authors draw an explicit parallel with the theory of descriptions when explaining this:

The symbols for classes, like those for descriptions, are, in our system, incomplete symbols: their uses are defined, but they themselves are not assumed to mean anything at all. That is to say, the uses of such symbols are so defined that, when the *definiens* is substituted for the

definiendum, there no longer remains any symbol which could be supposed to represent a class. Thus classes, so far as we introduce them, are merely symbolic or linguistic conveniences, not genuine objects as their members are if they are individuals.

(Whitehead and Russell, 1925, pp. 71–72).

This, then, is clear evidence that Russell saw a connection between the theory of descriptions and his attempts to solve the contradiction in 1910. However, if this was all there was to the connection, one might be tempted to dismiss it as somewhat tenuous. Russell's insistence on the absence of classes from the ontology of *Principia* is commonly viewed as an eccentric but inessential component of his response to the contradictions. The formally effective means of blocking the contradictions in *Principia* is the theory of types, a formal construction which is far more simply developed *within* a theory of classes, than in Russell's no-classes system. However, there is a great deal more to the connection that Russell is alluding to in the later passages than is to be found in the pages of *Principia*.

Immediately after discovering the theory of descriptions, some time before the development of *Principia's* no-classes theory, Russell developed a theory that he also called the 'no-classes' theory, which has a far closer connection to the theory of descriptions than is maintained in *Principia*. The earlier theory was otherwise known as the 'substitutional theory of classes and relations', and was first, tentatively, made public in Russell (1906a). This theory, which was overlooked until quite recently, connects the theory of descriptions directly with the theory of types, thus fully explaining Russell's account of the theory of descriptions as the first step in solving the contradictions.²

The substitutional theory eschews all mention of classes in place of what Russell calls *matrices*, which are expressed by symbols of the form ' p/a '. Both ' p ' and ' a ' are names of entities. A matrix is an incomplete symbol which has no meaning in isolation but occurs in propositions such as that expressed by the formula ' $p/a!x!q$ ', which is to be read ' q results from the substitution of x for a in all those places (if any) where a occurs in p '.³ As Russell took propositions to be entities at this time, we can form matrices in which p is a proposition. This allows Russell to eliminate classes in favour of matrices, for we can now say that x is a member of the 'class' p/a just in case there is a true proposition resulting from the substitution of x for a in p ,⁴ i.e:

$$x \in p/a =_{\text{df}} \exists q (p/a!x!q)$$

Matrices of the form p/a therefore have the formal properties Russell previously needed classes for. Classes of classes (or functions of functions – Russell draws no distinction between classes and propositional functions in the substitutional theory) can also be replaced by matrices of the form $r/(p/a)$. A ‘class’ q/w is a member of $r/(p/a)$ if and only if a true proposition results from substituting it for p/a in r , i.e.:

$$q/w \in r/(p/a) =_{\text{df}} \exists z \{r/(p/a)(q/w)z\}$$

The process may be continued for classes of classes of classes, and so on *ad infinitum*.

An immediate consequence of this is that no class can be a member of itself. In order to substitute a matrix for something in another matrix, we need a matrix to substitute for if we are to have a meaningful result. For example, we can substitute r/z for q/w in a propositional context. But we cannot substitute r/z for w in the proposition q , or the result will be nonsense. As Russell puts it:

But now ‘ x is an x ’ becomes meaningless, because ‘ x is an α ’ requires that α should be of the form p/a , and thus not an entity at all. In this way membership of a class can be defined, and at the same time the contradiction is avoided.

(Russell, 1906b, p. 172)

Thus we effectively obtain a simple theory of types for our theory of ‘classes’ (i.e. matrices) directly from the grammar of the language we are employing. Russell’s solution to the contradiction in the substitutional theory is thus very simple: there is no class of all classes which are not members of themselves because this would require a matrix of the form $p/a(p/a)$ which is mere nonsense, amounting to something like ‘the result of replacing a in p by the result of replacing a in p by’. Thus the theory of types emerges naturally in the substitutional theory and there is a very clear sense in which, as Russell would often put it, violations of type distinctions are nonsense. These comments, which have seemed to be question-begging stipulations to many who objected to the version of type-theory published in *Principia*, make a great deal more sense once we notice that Russell identified the substitutional theory and the theory of types in 1906.

The substitutional theory, in various forms, persisted in Russell’s work on type-theory for some time, its last appearance being something of an understated role in the 1908 paper ‘Mathematical Logic as Based on

the Theory of Types'.⁵ By the time of *Principia Mathematica*, however, it had been abandoned and the theory of types contained there involved additional complexities, such as its interaction with Russell's notorious multiple relation theory of judgement.⁶ Regardless of the details of the theory of types that Russell eventually arrived at, however, we can see that, as far as the actual development of the theory went, there was indeed an essential link with the theory of descriptions via the substitutional theory, for the theory of types was originally just the theory sketched above. In this theory, the notion of a type is an immediate and intuitive consequence of the analysis of classes (and functions) as incomplete symbols or matrices.

There can be little doubt then that Russell would have prized the theory for its extension to the paradoxes. But does this give us the explanation for Russell's rejection of the 1903 theory of denoting in favour of the 1905 theory of descriptions? It does not seem feasible to say that it does. To say that it does will require us to attribute to Russell the ability to see into the future, for there is no way that he could have known prior to discovering the theory of descriptions that it would have led to this convenient result. The idea that denoting phrases are incomplete symbols was not something that guided his investigations into the concept of denoting during the intense period of work on the matter that culminated in 'On Denoting'. Rather it was a late, welcome, realization after he had arrived at the theory in 'On Fundamentals'. It cannot, therefore, have been what led him to reject the 1903 theory. As mentioned in the previous chapter, we now have evidence from 'On Fundamentals' that it was the perplexing argument about the first line of Gray's *Elegy* that convinced Russell in 'On Fundamentals' that his earlier theory was wrong and that the theory of descriptions was right. In the next section, I will examine more closely the role that the GEA played in driving Russell to the theory of descriptions.

3.2 The Gray's *Elegy* Argument⁷

During the period leading up to the discovery of the theory of descriptions in 1905, when Russell wrote copious amounts of material on denoting, he was not trying to refute his 1903 theory. This is evident from an examination of this material, the surviving parts of which are published in volume 4 of the *Collected Papers*. For the most part, Russell is actively developing the 1903 theory of denoting and seeking to extend it under the obvious influence of Frege. In the important 1905 manuscript 'On Fundamentals', Russell arrives at the theory of descriptions

immediately after considering a version of the GEA that he apparently takes to refute the 1903 theory (and Frege's theory of sense and reference). Although the GEA only emerges in 'On Fundamentals' (parts of which are repeated word-for-word in 'On Denoting'), there are signs that the seed of the argument at least was germinating in Russell's mind before the manuscript was written. Very early in the manuscript Russell discusses a phenomenon that is taken up in the GEA (and one we will explore in detail shortly), namely the fact that whenever a denoting phrase occurs in a sentence or as part of a larger denoting phrase, it contributes its meaning (a denoting concept) to the proposition, while its denotation is contributed to the truth-conditions of the proposition:

If *a* is a denoting expression, and we want what it denotes to occur in an *undenoting* position, we must know what it denotes otherwise than as denoted. For if we put *a* there, it will be the *meaning* of *a* that will occur, not the denotation. And if we put (say) $\delta'a$ to stand for 'the denotation of *a*', that still only denotes the denotation, and does not mean it.

(Russell, 1905d: 360)

Shortly after writing this, Russell gives the following '*Important Principle*':

If a denoting expression denotes a meaning, and is put in a meaning-position in a complex, it will be the meaning meant by the denoting expression, not the meaning denoted that will occur there.

(ibid.: 361)

A few paragraphs later he writes:

I think the above important principle makes it plain why things go wrong. It shows that, if we assert a connection between a variable in a meaning-position and a variable in an entity-position, we must avoid denoting complexes, since these will stand for their meaning in the one position and their denotation in the other.

(ibid.)

Clearly the problems raised by what Makin (2000) calls the 'aboutness-shifting' properties of denoting complexes are driving Russell's thought here, as they are in the GEA. These concerns can indeed be traced back further than 'On Fundamentals'. For example, in 1903 Russell wrote a

manuscript 'On Meaning and Denotation' that explores in great detail the way in which denoting concepts can be constituents of a proposition without being what the proposition is about:

The rule must be, that when a denoting complex forms part of a proposition, in the sense of being a constituent of it, and when the complex does not form part of any other denoting complex, then it is what the complex denotes, and not the constituents of the complex, that the proposition is *about*; further a proposition is *about* any entity which is designated, not expressed, in the thought of the proposition, and is not part of any denoting complex in the proposition.

(Russell, 1903d: 328)

The first part of 'On Meaning and Denotation' is one of the clearest of the manuscripts written during this time, and has the look of a draft that Russell was intending for more than just his and Whitehead's use: many of Russell's manuscripts from this period read more less like extended letters to Whitehead, but 'On Meaning and Denotation' is more polished, both in its literary style and its structural presentation. It is divided into sections and contains the sorts of footnotes one would expect from an academic article, for example 'See my *Principles of Mathematics*, Chap. V'. Fifty-seven folios into the manuscript, there is an abrupt change of tone, under the heading 'Miscellaneous Notes' in which Russell has written '(From this point onwards, I have merely put down any remarks that occurred to me, without system or consecutiveness)' (ibid.: 339). After this point the manuscript rapidly degenerates into unstructured notes. This suggests that what precedes it was intended to be something more than mere notes. The account of denoting in the opening sections is clear and accessible. What is particularly noticeable is that there is very little difference between the theory outlined there and the theory of the *Principles*. There is no evidence that Russell was looking for a refutation of his earlier theory. All of this appears to provide strong confirmation that when Russell arrived at the GEA, it was not as the result of any dissatisfaction with the earlier theory of denoting. This in turn seems to leave us with only one explanation for Russell's retraction of that theory and subsequent shift to the theory of descriptions: when he stumbled on the GEA it convinced him that there was a fatal flaw in the theory of denoting, and that the theory of descriptions overcame or avoided this difficulty. To confirm this hypothesis, we need to find what that flaw could be.

Let us start by citing the GEA in full. Following Makin (2000), I will label the paragraphs of the argument (A) – (H) to facilitate discussion of the argument:

- (A) The relation of the meaning to the denotation involves certain rather curious difficulties, which seem in themselves sufficient to prove that the theory which leads to such difficulties must be wrong.

- (B) When we wish to speak about the *meaning* of a denoting phrase, as opposed to its *denotation*, the natural mode of doing so is by inverted commas. Thus we say:

The centre of mass of the Solar System is a point, not a denoting complex;

‘The centre of mass of the Solar System’ is a denoting complex, not a point.

Or again,

The first line of Gray’s *Elegy* states a proposition.

‘The first line of Gray’s *Elegy*’ does not state a proposition. Thus taking any denoting phrase, say *C*, we wish to consider the relation between *C* and ‘*C*’, where the difference of the two is of the kind exemplified in the above two instances.

- (C) We say, to begin with, that when *C* occurs it is the *denotation* that we are speaking about; but when ‘*C*’ occurs, it is the *meaning*. Now the relation of meaning and denotation is not merely linguistic through the phrase: there must be a logical relation involved, which we express by saying that the meaning denotes the denotation. But the difficulty which confronts us is that we cannot succeed in *both* preserving the connexion of meaning and denotation *and* preventing them from being one and the same; also that the meaning cannot be got at except by means of denoting phrases. This happens as follows.

- (D) The one phrase *C* was to have both meaning and denotation. But if we speak of ‘the meaning of *C*’, that gives us the meaning (if any) of the denotation. ‘The meaning of the first line of Gray’s *Elegy*’ is the same as ‘The meaning of “The curfew tolls the knell of parting day”’, and is not the same as ‘The meaning of “the first line of Gray’s *Elegy*”’. Thus in order to get the meaning we want, we must speak not of ‘the meaning of *C*’, but of ‘the meaning of “*C*”’, which is the same as ‘*C*’ by itself. Similarly ‘the denotation of *C*’ does not mean the denotation we want, but means something which, if it denotes at all, denotes

what is denoted by the denotation we want. For example, let 'C' be 'the denoting complex occurring in the second of the above instances'. Then

C = 'the first line of Gray's Elegy', and

the denotation of C = The curfew tolls the knell of parting day. But what we *meant* to have as the denotation was 'the first line of Gray's Elegy'. Thus we have failed to get what we wanted.

- (E) The difficulty in speaking of the meaning of a denoting complex may be stated thus; The moment we put the complex in a proposition, the proposition is about the denotation; and if we make a proposition in which the subject is 'the meaning of C', then the subject is the meaning (if any) of the denotation, which was not intended. This leads us to say that, when we distinguish meaning and denotation, we must be dealing with the meaning; the meaning has denotation and is a complex, and there is not something other than the meaning, which can be called the complex, and be said to *have* both meaning and denotation. The right phrase, on the view in question, is that some meanings have denotations.
- (F) But this only makes our difficulty in speaking of meanings more evident. For suppose C is our complex; then we are to say that C is the meaning of the complex. Nevertheless, whenever C occurs without inverted commas, what is said is not true of the meaning, but only of the denotation, as when we say: The centre of mass of the Solar System is a point. Thus to speak of C itself, *i.e.*, to make a proposition about the meaning, our subject must not be C, but something which denotes C. Thus 'C', which is what we use when we want to speak of the meaning, must be not the meaning, but something which denotes the meaning. And C must not be a constituent of this complex (as it is of 'the meaning of C'); for if C occurs in the complex, it will be its denotation, not its meaning, that will occur, and there is no backward road from denotations to meanings, because every object can be denoted by an infinite number of different denoting phrases.
- (G) Thus it would seem that 'C' and C are different entities, such that 'C' denotes C; but this cannot be an explanation, because the relation of 'C' to C remains wholly mysterious; and where are we to find the denoting complex 'C' which is to denote C? Moreover,

when C occurs in a proposition, it is not *only* the denotation that occurs (as we shall see in the next paragraph); yet, on the view in question, C is only the denotation, the meaning being wholly relegated to 'C'. This is an inextricable tangle, and seems to prove that the whole distinction of meaning and denotation has been wrongly conceived.

- (H) That the meaning is relevant when a denoting phrase occurs in a proposition is formally proved by the puzzle about the author of *Waverley*. The proposition 'Scott was the author of *Waverley*' has a property not possessed by 'Scott was Scott', namely the property that George IV wished to know whether it was true. Thus the two are not identical propositions; hence the meaning of 'the author of *Waverley*' must be relevant as well as the denotation, if we adhere to the point of view to which this distinction belongs. Yet, as we have just seen, so long as we adhere to this point of view, we are compelled to hold that only the denotation can be relevant. Thus the point of view in question must be abandoned.

(Russell, 1905c: pp. 48–51)

The argument is, to put it mildly, dense. Had the argument been presented in an undergraduate essay, most philosophers would probably dismiss it as incoherent. Out of respect to its author, most readers of 'On Denoting' seek to be more charitable. I suspect, however, that all, at some stage, find it hard to resist the temptation to locate the source of the 'inextricable tangle' in a woeful failure to respect a clear distinction between use and mention. Some, like Church, take this to be all there is to the GEA, which he says is:

traceable merely to confusion between use and mention of expressions of a sort which Frege is careful to avoid by the use of quotation marks. Russell applies quotation marks to distinguish the sense of an expression from its denotation, but leaves himself without any notation for the expression itself; upon introduction of, say, a second kind of quotation mark to signalize names of expressions, Russell's objections to Frege completely vanish.

(Church, 1943: 302)⁸

Church's evident exasperation with Russell merits some sympathy. Russell is certainly not unequivocal in his use of his own notation. For example, having established that 'C' is a denoting phrase *used* to refer to

its denotation, he immediately violates his own convention by assuming that *C* is a 'denoting phrase' as the first premise of his argument (ibid., p. 49). We can see Russell's error if we rewrite the key part of the passage in question in the notation introduced in the previous chapter:

The one phrase *C* was to have both meaning and denotation. But if we speak of /the meaning of *C*/, that gives us the meaning (if any) of the denotation. /The meaning of the first line of Gray's *Elegy*/ is the same as /The meaning of 'The curfew tolls the knell of parting day'/ and is not the same as /The meaning of /the first line of Gray's *Elegy*//. Thus in order to get the meaning we want, we must speak not of /the meaning of *C*/, but of /the meaning of /*C*//, which is the same as /*C*/ by itself.

(ibid.)

Inserting quotation marks around the '*C*' in the first sentence appears to strip Russell's argument of any validity one might otherwise claim for it. For we would then have '/the meaning of "*C*"/' in the second sentence, which would give us the meaning of the phrase '*C*' (just as we have in Russell's example of '/the meaning of "the curfew tolls the knell of parting day"/'), not its denotation, as Russell claims. Evidently, a charitable reading of Russell's argument that tries to find more than confusion at work here must take a slightly different tack.

If we forgive Russell some small degree of equivocation, however, the majority of the argument is *relatively* easy to interpret. It does not seem plausible to me to deny any equivocation in Russell's terminology. Levine (2004 and 2005) makes a valiant attempt to do so, by taking Russell's use of the expression '*C*', both within and without quotes, as a device for picking out denoting concepts, never the phrases that express them. However, as Levine notes (2004: 268–272), this has some very counterintuitive consequences, the most problematic one being that we cannot read Russell's talk of denoting *phrases* as literal, but have to interpret his use of the phrase 'phrase' here to mean 'concept'. Levine offers some justification for departing from a literal reading of the phrase here by appealing to other well documented instances where Russell uses linguistic terminology to speak of non-linguistic propositional constituents, for example, he often talks of 'verbs', 'adjectives', 'predicates', etc., when he clearly has in mind the properties and relation that he takes to be their semantic values. This occurs regularly throughout the *Principles*, for example. However, these cases seem very different, as they

are all cases where Russell's usage is quite familiar from philosophy as it was done the time: we also see it in Moore, for example, and in Bradley, from whom it seems likely that Moore and Russell inherited the habit. The non-linguistic senses of these expressions was fairly firmly established in the philosophical lexicon at the time when Russell was writing, to the extent that we need not attribute a departure from the literal to Russell, as opposed to simply recognizing a (harmless, because easily detectable) lexical ambiguity in the terms. But the phrase 'phrase' does not seem to fall into this category. On the contrary it is a word that Russell often carefully selects (especially when looking for a word to attach to the prefix 'denoting') during this period to unambiguously pick out linguistic material. A pertinent example occurs in the GEA itself when Russell writes that 'the relation of meaning and denotation is not merely linguistic through the phrase' (Russell, 1905c: 49). Levine's interpretation therefore does not seem plausible.

It appears that we have no choice but to attribute an equivocation to Russell. This equivocation seems to happen at paragraph F.⁹ Paragraphs A-E are most naturally interpreted as taking C (without quotes) as schematic for an expression, while 'C' is simply schematic for an expression in quotes which is defined as a means of designating the *meaning* of the expression inside the quotes. To make things clearer, and to keep in line with other commentaries on the GEA, we will continue to use slashes for this latter device and preserve quotes for picking out expressions. The need for this device is established in paragraphs (A) – (B). Thus we have:

1. The present prime minister of England is a person, not a denoting concept.
2. /the present prime minister of England/ is a denoting concept, not a person.
3. 'the present prime minister of England' is a denoting phrase, not a denoting concept.

In paragraph (C), Russell goes on to point out that the similarity between these two expressions 'C' and '/C/' – i.e. Russell's C and 'C' – is an accident of language. Whatever relation holds between the two things picked out by the expressions cannot depend on any property of their linguistic expressions. The relation between the meaning of the expression and its denotation must be what Russell calls a 'logical' one (it is not 'linguistic through the phrase'). This certainly seems right. It is because the denotation of a denoting phrase satisfies its meaning, that the phrase denotes it. The meaning provides a condition that the

denotation must meet, and this is no linguistic feature, but a fact about the thing denoted. According to Russell, however, when we try to state what this relation connecting the meaning to the denotation is, we find that we are unable to do so without the meaning collapsing into the denotation. This is the central thrust of the GEA. There is also the additional remark: 'also that the meaning cannot be got at except by means of denoting phrases'. So it seems that there are two key problems that the GEA is supposed to illustrate which, either independently or in conjunction with one another, are intended to refute the theory that distinguishes meaning and denotation:

(Objection 1) It is impossible to maintain a logical connection between the meaning and denotation of a phrase while also maintaining a distinction between these two elements.

(Objection 2) It is impossible to speak of the meaning of a denoting phrase without using a denoting phrase.

Paragraph (D) begins the demonstration of (Objection 1) by establishing that because denoting concepts are, in Makin's (2000) phrase, 'aboutness-shifters', any declarative sentence with the phrase 'C' (i.e. Russell's C – without quotes) in subject position will express a proposition which has the denoting concept /C/ occurring in it and, therefore, will be about whatever is denoted by the denoting concept in question. So the phrase 'the meaning of C' will denote the meaning of the *denotation* of 'C' (and 'the denotation of C' will denote the *denotation* of the denotation of 'C'). Thus the only way we can employ the phrase 'the meaning of x' to get at the meaning we want is to put the expression for the denoting concept in place of x – thus, 'the meaning of /C/'. As Russell points out, this means the same thing as '/C/', as the slashes (Russell's quotes) are defined as expressions which pick out meanings of what they contain.

In paragraph (E), after summarizing the argument of paragraph (D), Russell seems to conclude from this that denoting concepts are identical with their meanings – there is not a denoting concept /C/ which has a meaning distinct from it, otherwise 'the meaning of /C/' would not be synonymous with '/C/'. So denoting concepts *are* meanings. Up to this point, the argument is quite involved and intricate – but coherent enough. But now we arrive at the hardest paragraphs to interpret. Somehow, (Objection 1) and (Objection 2) are supposed to emerge from the remaining paragraphs.

(Objection 2) raises a fairly immediate worry. If every denoting phrase introduces a new denoting concept, each attempt to denote a denoting

concept must introduce a new denoting concept, and so we will have a potentially infinite hierarchy of them. Take the proposition:

<the Prime Minister of Britain is a man>

In the subject position of this proposition is not its logical subject (which is a man), but a denoting concept, /the Prime Minister of Britain/, which denotes its real logical subject. But now consider what happens if we make this denoting concept itself the subject of a proposition:

</the Prime Minister of Britain/ is a denoting concept>

No constituent of this proposition can be /the Prime Minister of Britain/ any more than the Prime Minister of Britain can be a constituent of <the Prime Minister of Britain is a man>. The mark of a denoting concept is that it stands proxy for an object which (except in the case of certain identities of the form $\langle (ix)(\phi x) = a \rangle$) is not a constituent of the proposition even though that proposition is *about* it. This is the point made very clearly in the passage from p. 328 of 'On Meaning and Denotation' quoted above. Hence </the Prime Minister of Britain/ is a denoting concept> cannot contain /the Prime Minister of Britain/ as this is a denoting concept denoting the Prime Minister of Britain, so the proposition would be *about* David Cameron, not the denoting concept we are after. We must conclude, then, that </the Prime Minister of Britain/ is a denoting concept> contains some *new* entity denoting the denoting concept /the Prime Minister of Britain/. If we now make this new denoting concept the logical subject of a further proposition, we find ourselves in a similar situation and the hierarchy begins – a hierarchy of denoting concepts (meanings) in which, at any point in the development of that hierarchy, the number of denoting concepts introduced is always greater than the number of denoting concepts we can denote. Do we have a vicious regress or a harmless hierarchy here? Hylton (1990, p. 251) sees the former, while Makin (2000, p. 28) sees the latter. I am inclined to think that the difficulty is curious enough for Russell to number it among the 'certain rather curious difficulties' (Russell, 1905c, p. 48) that count against the distinction between meaning and denotation. Nonetheless, there is surely more to the Gray's Elegy argument than this.

An alternative interpretation, suggested by Dummett (1973, p. 267), is that the argument can be understood as an attack on Frege's notion of 'indirect sense'. As is well known, Frege thinks that expressions

occurring in indirect speech (e.g., 'P' in 'S said that P') do not have their ordinary sense. Rather they refer in such contexts to their ordinary 'direct' sense; hence their indirect sense must be a mode of presentation of their ordinary sense. Russell famously points out in 'On Denoting' that the sense of an expression determines its reference on the Fregean model, but not vice versa: 'there is no backward road from denotations to meanings, because every object can be denoted by an infinite number of different denoting phrases' (Russell, 1905c, p. 50). This observation, Dummett thinks, opens up Frege's account to the following objection: in the absence of any clear account of what the sense of an expression in opaque contexts is taken to be, Frege has no way of explaining the *reference* of expressions in sentences involving double *oratio obliqua* (indirect speech). As the expression in single *oratio obliqua* refers to its ordinary sense, and thus has an indirect sense, the referent of the expression in double *oratio obliqua* will be its sense in single *oratio obliqua*, namely its indirect sense. But, as this leaves us unable to determine what the referent of the expression is in double *oratio obliqua*, we are accordingly left unable to judge (or even know what it would be to judge) the truth-value of sentences involving double *oratio obliqua*.

Dummett's reconstruction of the argument, though ingenious and perceptive in its own right, is not a convincing interpretation of Russell's intention for a number of reasons, the main one being that Russell never suggests that the criticism is directed in particular at Frege's (or anybody else's) treatment of expressions in indirect speech. To read something like this argument into Russell's words requires further work. It is possible to do so, however. Indeed Makin (2000, pp. 28–29) does just this, showing that a similar problem emerges if we consider the relation of denoting occurring between denoting concepts at different levels of the same hierarchy of concepts that troubled Hylton. Like Dummett's argument, Makin's reconstruction of Russell's argument is ingenious and it has the exegetical edge over Dummett's in that it raises a genuine problem with the theory of denoting rather than being restricted to a critique of a local area of Frege's theory that Russell himself had no real concern with. Nonetheless, both Hylton's and Makin's versions of the argument still require us to take quite a drastic departure from the text. The hierarchy of denoting concepts that plays such an important (though different) role in each account is never alluded to by Russell.

A bigger concern with this as a proposed interpretation of the GEA is that it does not seem to be addressing (Objection 1), only (Objection 2). Yet, when the two objections are raised in paragraph (C), (Objection 2) seems to be an aside – an additional problem tacked on as a final twist

of the knife. The objection that is supposed to inflict the mortal wound on the theory of meaning and denotation clearly seems to be (Objection 1) which does not seem to be particularly concerned with the hierarchy of denoting concepts. Furthermore, the structure of the GEA strongly suggests that the killer blow is struck by consideration of the *Waverley* example at paragraph (H), which is claimed to provide data that cannot be accounted for by the theory under scrutiny. Yet, again, this seems to have no essential connection with the objection regarding the hierarchy of denoting concepts, which appears wholly independent of it. A satisfactory unravelling of paragraphs (F) – (H) should therefore put (Objection 1) centre stage in a way that makes the appeal to the *Waverley* example at paragraph (H) explicable.

Working backwards from paragraph (H), which offers a very welcome helping of clarity after the almost impenetrable arguments of paragraphs (F) and (G), it is obvious that paragraph (H) is intended to give a *reductio ad absurdum* argument against the theory of meaning and denotation. Because the proposition that Scott was the author of *Waverley* has a property that is not had by the proposition that Scott was Scott, the two propositions must be distinct. Russell concludes from this that the meaning of denoting phrase ‘the author of *Waverley*’ must be relevant to the truth-conditions of sentences containing it, if the theory of meaning and denotation is correct. The argument here stands in need of a little unpacking. With the gaps filled in, the argument runs as follows. The sentences (S1) and (S2) below must express different propositions, namely (P1) and (P2) respectively:

- (S1) Scott was the author of *Waverley*
- (S2) Scott was Scott
- (P1) <Scott was the author of *Waverley*>
- (P2) <Scott was Scott>

The evidence for this is that (P1) has a property not shared by (P2). So (P1) \neq (P2). But the only difference between (P1) and (P2) is that (P1) is expressed by (S1) and (P2) is expressed by (S2). And the only difference between (S1) and (S2) is that (S1) contains the definite description ‘the author of *Waverley*’ whereas (S2) contains the co-referring expression ‘Scott’. So the difference between these two expressions must be responsible for the difference between (P1) and (P2). But these expressions, being co-referring, do not differ in their denotation, only in their meaning. Thus the meaning of ‘the author of *Waverley*’ must be relevant to the truth-conditions of (S1).

Having established this point, Russell then completes the *reductio* by adding: 'Yet, as we have just seen, so long as we adhere to this point of view, we are compelled to hold that only the denotation can be relevant. Thus the point of view in question must be adandoned' (Russell, 1905c: 50–51). For the *reductio* to be valid, we need the evidence appealed to here, namely that 'only the denotation can be relevant'. This is what we must extract from paragraphs (F) and (H) to preserve the validity of the GEA.

I mentioned above that an important shift in Russell's use of his own notation seems to occur at paragraph (F). In the preceding paragraphs, his use of 'C' is best understood as a schematic denoting phrase. But this all appears to change in paragraph (F) where Russell asks us to 'suppose C is our complex' (ibid.: 50). It seems that 'C' (Russell's C) has now taken on the role of '/C/' (Russell's 'C'). Then, to make matters worse, in the very next sentence Russell argues that 'whenever C occurs without inverted commas, what is said is not true of the meaning but only of the denotation' (ibid.). The first shift of notational gears is confusing enough, but it seems that Russell himself has overlooked it in the second remark, heaping further confusion on things. For surely, if 'C' is now playing the role of '/C/' then the earlier notational features cannot be appealed to after this switch. To appeal to them is simply to commit a fallacy of equivocation, for though 'C' is now occurring without quotation marks, it has replaced (and inherited the semantic features of) the expression which does have quotation marks. In other words, if we substitute 'C' for '/C/', C now has the properties earlier bestowed (by definition of the notational conventions) on '/C/' – so it is used to talk about meanings, not denotations, contrary to what Russell is saying. If the GEA is to be salvaged, we must again find a more charitable interpretation of what Russell has in mind.

I am inclined to agree with Makin (2000) that a genuine change of emphasis occurs in the second half of the GEA: the first half approaches the subject from the point of view of a consideration of the linguistic expression of denoting concepts (what Makin calls the 'symbolic round' of the argument), while the second half approaches it by direct consideration of the occurrence of denoting concepts in propositions (what Makin calls the 'substantial round'). Makin locates paragraph (E) as a point of transition. As should be clear from the exposition above, I do not read paragraph (E) in that way – my reading is that paragraph (E) is simply concerned with establishing that denoting complexes *are* meanings. The point where the argument changes emphasis is the paragraph (F). In this paragraph, Russell can be best understood as talking directly about the occurrences of /C/ in propositions. His comment

that 'whenever C occurs without inverted commas, what is said is not true of the meaning but only of the denotation' does make sense if we understand it not as a remark about the occurrence of the expression 'C' in a sentence, but as a remark about the occurrence of /C/ in a proposition (recall that in paragraph (F) Russell has shifted to treating 'C' as he previously treated '/C/'). If the denoting concept itself occurs in the proposition then, as Russell says, it contributes its *denotation*, not *itself* (i.e. its *meaning*, by the identification of meaning and complex in paragraph (E)), to the truth-conditions of the proposition. So, paragraph (F) continues, if we want to speak directly about /C/ we will need some complex which denotes /C/ to facilitate this. But, Russell continues (on the interpretation I am suggesting) /C/ must not be a constituent of this new complex – because if it were, it would contribute its denotation, not its meaning (that is, itself) to the complex that it is a constituent of. As 'there is no backward road from denotations to meanings', the denotation would not allow us to recover the meaning: there are infinitely many possible different descriptions of any object, so we cannot determine which meaning contributed that object from the object alone.

That /C/ cannot be a constituent of any denoting concept denoting it Russell takes to be the lesson learned from paragraph (E). It is interesting to note that in 'On Fundamentals' there is a slightly different order to this part of the argument with the point from paragraph (E) coming after the point that is being made in paragraph (F), so that it actually plays the role of clarifying the argument from paragraph (F):

For suppose C is our complex; then we say C is the meaning of the complex, Nevertheless, in all ordinary propositions in which C occurs, what is said does not hold of C, but of what C denotes. To speak of C itself requires either a concept which denotes C, or else some further kind of occurrence ... And a concept which denotes C must not contain C as entity (as is the case, e.g., with 'the meaning of C', for then we get the meaning of the denotation of C occurring where we meant to have the meaning.

For the relations of meaning and denotation, it is instructive to observe the following pair of facts:

1. If C is a denoting complex, 'The meaning of C' does not *denote* the *meaning* of C, but the meaning of the denotation of C.
2. If C is a denoting complex, 'the denotation of C' does not *mean* the *denotation* of C, but 'the denotation of C'.

(Russell, 1905d: 382–383)

Denoting complexes, by their very nature, contribute their denotations to complexes in which they occur. So if we want to find a denoting complex denoting /C/, it cannot contain /C/ as a constituent. In other words, whatever denoting complex is the semantic value of the expression '/C/' cannot be part of the semantic value of the expression 'the meaning of /C/'.

That this is bringing us to the crux of the GEA can be seen by Russell's remark immediately after writing (1) and (2) in the above passage, namely: 'these two facts show the indissolubility of meaning and denotation' (Ibid), a comment obviously echoed by (Objection 1) in 'On Denoting'. Paragraph (G) delivers this conclusion to the argument.

Paragraph (G) opens by concluding from the foregoing considerations that /C/ and the denoting complex that denotes it are different entities. In light of paragraph (F), it seems clear that Russell means slightly more than this: not only are the two complexes distinct, but they are wholly independent of one another, in the sense that /C/ is not a constituent of the complex which denotes it. Russell's first complaint is that this leaves us without any explanation of the relation had by a complex to what it denotes. That is, we have no explanation of the relation of *denoting*. It is 'wholly mysterious' now why any particular complex should denote what it does denote rather than anything else. Denoting complexes provide a condition that is to be satisfied by what they denote. What the GEA has shown is that in the case where we want to denote a denoting complex /C/ by a further complex /X/ (I call this further complex, denoting /C/, '/X/' to remove any apparent similarity between the two complexes that might arise as an accident of their linguistic expressions), /X/ cannot contain /C/ as a constituent. But, in that case, the condition given by /X/ that /C/ must meet in order to be denoted by /X/ cannot make any reference to /C/. This leaves both the nature of /X/ and the fact that it denotes /C/ 'wholly mysterious'.

Russell's reasoning in the GEA has led him to this point of the argument because he has maintained rigorously (and correctly) that denoting complexes, when they occur in (both propositional and other denoting) complexes, contribute their denotations to what those complexes are about. This now, finally, positions him to complete the final step for the *reductio ad absurdum* argument. The distinction between meaning and denotation entails that denoting complexes are about their denotations, not their meanings, and contribute these alone to the truth-conditions of propositions in which they occur. But the *Waverley* example, spelled out in paragraph (H), shows that denoting complexes do contribute their meanings also (at least in some cases). So the theory that

distinguished denoting complexes from their denotations makes incorrect predictions about incontrovertible linguistic data. The assumption (that there is a distinction between the meaning and denotation of a denoting phrase) must be flawed.

It is worth noting, as a final point in favour of the GEA, that Russell is cautious in his conclusion of the argument. He does not conclude that the theory of meaning and denotation has been proved false, but draws the weaker conclusion that it has led to 'an inextricable tangle ... [which] seems to prove that the whole distinction of meaning and denotation has been wrongly conceived' (Russell, 1905c: 50). This leaves Russell in a strong dialectical position. He has just presented an alternative theory of notable elegance and simplicity.¹⁰ If the theory of meaning and denotation does indeed lead to an 'inextricable tangle', his own theory should clearly be favoured, especially as he immediately proceeds to show how it is capable of avoiding all of the other puzzles which face a theory of denoting.

4

Descriptions and Logical Form

4.1 Introduction

This chapter marks a point of transition for this book. After the introductory work carried out in the first chapter, I have been focusing primarily (though not exclusively) on historical aspects of the theory of descriptions. In particular, I have sought to reassess some of the traditional interpretations of the place of the theory in Russell's philosophy in terms of how it relates to the theory that preceded it, the motivations that led Russell to the theory, and the role that the theory played for him after its inception. In this chapter I will start to examine the ways in which the theory applies to contemporary philosophy – philosophy of language in particular.

The change of focus is not a complete departure from historical enquiry or Russell scholarship, however. Indeed one of my aims in the remainder of the book will be to present a direct challenge to a widely entrenched interpretation of Russell's philosophy that I believe is inaccurate and has served to make Russell appear less relevant to contemporary philosophy of language than he deserves. The interpretation I wish to challenge holds that Russell was fundamentally opposed to the entire project of a philosophy of language. The interpretation is stated very clearly in the following passage from Tully (2003), which I have chosen for its clarity – Tully is just one of many who adhere to this view: 'His [Russell's] opinion was that natural language itself, like common sense beliefs about perception, was rife with archaic metaphysical assumptions and unworthy of philosophical credence' (Tully, 2003: 334). This view has become the orthodoxy in Russell studies, and not entirely without reason.¹ The view originally emerged as a desire to resist the assimilation of Russell's philosophical doctrines either to the linguistic

philosophy of the later-Wittgenstein-inspired ordinary language philosophers, or the equally anti-metaphysical (though obviously very different) early-Wittgenstein-inspired Logical Positivists. Commendable though it surely is to resist the assimilation of Russell's project (or interpretations of it) to either of these alternatives, I believe any interpretation of Russell as someone uninterested in the philosophical analysis of natural language is an over-reaction. Russell may have thought that language was 'rife with metaphysical assumptions', but it does not follow that he thought it 'unworthy of philosophical credence'.

I will return to these general considerations about the nature of Russell's philosophical project and its relation to the philosophy of language in the final chapter. In this chapter and the following two, I will focus on specific areas where the theory of descriptions has relevance to contemporary linguistic concerns. In this chapter I will try to demonstrate that the theory of descriptions is, primarily, a contribution to the philosophy of language. This claim may seem trivial to most philosophers of language, who would most likely be bewildered by the suggestion that the theory would make a primary contribution anywhere else. The claim is a direct challenge to the orthodox interpretation of Russell, however. This underlines the extent of the gulf that has opened up between the interpretation of the theory of descriptions by historians of Russell's philosophy and the interpretation of it by current philosophers of language. According to historical orthodoxy, because Russell was analysing Russellian propositions with the theory of descriptions, the enterprise was a metaphysical, not a linguistic one. I will challenge this interpretation of the theory by arguing that the inference here is invalid. Analysis of Russellian propositions is not outside the proper scope of linguistic analysis. This chapter is therefore crucial to my project of seeking to close the gap between the historical and philosophical reactions to the theory of descriptions.

My argument will rest on a defence of a shift away from some key theses of Russell's, most notably his interpretation of descriptions as 'incomplete symbols', and his non-linguistic conception of logical form. A cynical reader may suspect, therefore, that my representation of Russell as one embarked on a project that may be accurately called 'philosophy of language' is achieved only through a distortion of, or departure from, Russell's own, anti-linguistic, position. This is not the case, however. The reasons for rejecting these doctrines that I will give are not that they are *not* elements of a linguistic theory of descriptions, but that they are the result of *mistaken* linguistic assumptions of Russell's. Their rejection, I will argue, is essential to the success of the theory of

descriptions, as measured by Russell's own criteria. Rejecting them preserves the essential results that Russell himself intended the theory of descriptions to secure. These are often results outside of the philosophy of language. However, it is work that Russell did in the philosophy of language that secures them.

I will bring these concerns into relief by examining recent and influential work on the theory of descriptions by Stephen Neale, and its reception by Russell scholars. Neale (1990) provides a full-scale reconstruction, elaboration, and extension of Russell's theory. The reconstructive element of the project involves a restatement of the theory in a language of restricted quantification (RQ). This reconstruction is designed to show the independence of the theory as a philosophical doctrine from the syntax of the language (PM) of *Principia Mathematica* that Russell couched the theory in. This is desirable because it shows that the theory is more relevant as a theory of natural language quantification than it may have appeared in Russell's hands. In particular, RQ does not inflict as much violence on the surface syntax of the natural language it is applied to beyond that independently required for capturing semantically relevant features like scope. Despite RQ's snug fit with surface syntax, however, its use is not intended to signify a retraction of Russell's doctrine that descriptions are 'incomplete symbols'. The preservation of a discrete expression (namely a restricted quantifier) corresponding to a quantified noun-phrase (NP) in the translation into RQ does not mark a commitment to there being a specific thing that the restricted quantifier stands for. The failure of an NP to stand for an object or, in Neale's favoured terminology, to contribute an object to truth-conditions, is what makes the NP an incomplete symbol. Thus NPs divide into those that refer and those that quantify. One of Neale's many extensions of the theory, accordingly, is an attempt to demonstrate that every NP of English is either a quantifier or a referring expression.

Neale's claim that his reconstruction of the theory of descriptions preserves Russell's insight that descriptions are 'incomplete symbols' has met with some resistance, apparently to his surprise.² The resistance arises from a concern that the smooth notational transition from clunky old PM formulas to their elegant RQ replacements conceals something, namely a more substantial replacement of some of Russell's philosophical motivations for the theory. This, it is felt, leaves Neale's version bereft of the original resources that justified calling descriptions incomplete symbols. In particular, it is argued, Neale's attempt to conjoin the theory with a Chomskyan syntactic theory inevitably discards Russell's original conception of logical form, replacing it with the LF representations

provided by best current syntactic theory. Aspects of Russell's conception of logical form such as the role it played in his metaphysics are thereby without a home in Neale's theory of descriptions. These aspects, however, are claimed to be central to the theory of incomplete symbols.

In what follows, I will both defend and attack Neale. I will defend his claim that he has preserved Russell's doctrine that descriptions are incomplete symbols. However, I will go on to argue, with a qualification, that he is mistaken to do so. I will argue that Neale follows Russell too closely by fallaciously inferring that because an expression does not contribute an object to the truth-conditions of sentences containing it, it does not have a unitary meaning that is grasped by one who understands it, or sentences containing it.

4.2 Descriptions as quantifiers and the LF hypothesis

Neale's reading of the theory of descriptions is that descriptions are simply a species of quantifier. This view has been common in formal semantics at least since work by Montague, and later by Barwise and Cooper on generalized quantifiers.³ Neale's preferred language for representing logical form is the language RQ of restricted quantification. A restricted quantifier directly represents what Russell called a 'denoting phrase', that is a determiner phrase formed by attaching a determiner to a nominal, as in 'every man', 'some man', 'a man', 'the man', etc. A determiner phrase of the form 'DF', where D is a determiner and F a nominal will be translated into RQ as the restricted quantifier expression '[Dx:Fx]'. This quantifier expression attaches to a formula containing the variable x , which is bound by the quantifier. Thus 'every F is G' becomes '[every x : Fx](Gx)'.

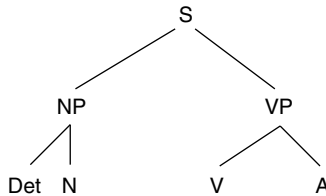
RQ is superior to PM in terms of elegance and, more importantly, its relationship to English. Translation of 'every F is G' into PM yields the formula

$$(1) \forall x(Fx \supset Gx)$$

If we take PM to reveal the underlying logical form of the original sentence, we must conclude that the logical form is radically different to the surface syntax of the sentence. This is even more evident if we accept the analysis proffered by the theory of descriptions of 'the F is G'. Our PM translation is

$$(2) \exists x((Fx \ \& \ \forall y(Fy \supset x = y)) \ \& \ Gx)$$

The original syntax of the sentence has been obliterated. In terms of surface syntax, there is no difference between ‘every F is G’ and ‘the F is G’. Both have a structure that we could represent by a conventional phrase-structure tree as follows:



Yet, after the translation into PM, the two sentences are transformed into formulas that have a very different structure to each other, to the extent that they even contain items of different lexical categories. Does this matter? It may not have troubled Russell – he took the theory of descriptions to provide evidence that grammar was a misleading guide at best to logical form. However, the claim that grammar conceals logical form is a somewhat complicated one. It would be over-simplistic to take Russell as just abandoning all hope of ever discovering facts about logical form from facts about grammar. Furthermore, regardless of the question of whether Russell himself saw this as a problem (a question we will address in due course), there is the more pressing question of whether he *should* have done. If the syntactic features of (1) and (2) that make them seem similar are illusory and do not survive translation into a language that renders perspicuous their logical forms, then those features cannot guide us in locating their logical forms. But in that case, what does guide us? Unless some feature or function of the sentence can be located that guides us in establishing its logical form, there will be no *systematic* means of recovering a sentence’s logical form.

One natural suggestion, perhaps the one that Russell would have offered if the question had been posed to him in this way, is that the systematic means of recovering a sentence’s logical form lies not with its syntax but with its semantics. Certainly one of Russell’s most elegant arguments for the analysis of definite descriptions given by the theory of descriptions makes a direct appeal to the semantics of a range of sentences that is supposed to demonstrate that descriptions cannot be singular terms. For example, the fact that (3) below is ambiguous, and that this ambiguity cannot be lexical, is provided as a ground for thinking that definite descriptions must have sufficient (grammatically

concealed) structural complexity to deliver two contrasting logical forms ((4) and (5)).

(3) The present king of France is not bald

(4) $\exists x((Fx \ \& \ \forall y(Fy \supset x = y)) \ \& \ \sim Gx)$

(5) $\sim \exists x((Fx \ \& \ \forall y(Fy \supset x = y)) \ \& \ Gx)$

This suggests that logical forms are revealed by truth-conditions rather than syntax. This suggestion is problematic for a number of reasons, however. For one thing it may be possible to react to the truth-conditional data without recourse to Russellian logical forms. Evans (1982)⁴ argues that it is possible to retain the Russellian truth-conditions of descriptive sentences within a referential semantics for descriptions. In a language in which inferences are governed by a negative free logic it is not unnatural to interpret names as scoped. If the name 'Pegasus' lacks existential import, then 'Pegasus does not fly' is perhaps ambiguous between 'Pegasus has the property of not flying' and 'it is not the case that Pegasus has the property of flying', these two clearly having distinct truth-conditions – apparently of the Russellian sort – for the free logician. A related alternative response to the ambiguity of (3) would be to question the classical syntax of the negation operator, and endorse a form of predicate negation alongside sentential negation. The point is that Russell's semantic data pose a problem that requires a solution, but they do not compel us to arrive at the solution by endorsing the thesis that descriptions are quantifiers at the level of logical form. What is needed for that is some syntactic data to that effect, coupled with an argument for tying logical form to syntax as well as (if not instead of) semantics. It is unsurprising, then, that Neale wants to tie in RQ with the LF representations postulated by Chomsky's syntactic theory.

Chomsky's work on syntax has undergone numerous changes since the publication of *Syntactic Structures* in 1957. For the purposes of the present discussion, we can overlook many of the details of his work and concentrate on a small set of fundamental and immensely influential notions. On Chomsky's Government and Binding Theory there are at least four levels of syntactic representation. Associated with any sentence is an SS (surface structure) representation, a DS (deep structure) representation, a PF (phonetic form) representation, and finally an LF (logical form) representation.⁵ A sentence's DS representation is the structure it has prior to any transformations licensed by the particular conventions of one's language. A simple example is the movement of a

determiner phrase (DP) in passivization. So, for example in (6) below, the DP 'the book' has been moved (in 7) from object position to subject position (which is vacant in 7):

(6) SS: The book was written.

(7) DS: ... was written the book.

Of course, the SS representation associated with (6) contains more information than the English sentence just provided. It is a syntactic structure making the structural information of the sentence's surface syntax explicit. The SS representation for (6) contains tree nodes, branches, and so on. This syntactic information is not made explicit in speech. Accordingly, the pronunciation of the sentence is associated with a level of representation distinct from either DS or SS, namely PF (phonetic form). However, neither SS nor PF displays the structural detail required for semantic evaluation. The common phenomenon of syntactic ambiguity demonstrates the need for a further level of syntactic representation. This level must make explicit all of the syntactic data required for semantic evaluation. For example, it must disambiguate the SS associated with (3) into two LFs associated with (4) and (5) respectively.

The suggestion we considered above was that the logical forms in (4) and (5) might be arrived at by direct consideration of their truth-conditions. This would have been evidence that logical forms were semantic, not syntactic, items. In addition to the objections considered above, the Chomskyan model offers some independent reason for thinking that logical forms are (at least partially) syntactic structures. For one thing, although scope phenomena are not commonly made explicit in the syntax of English, this failure is not uniform across all languages.⁶ Additionally, scope phenomena do interact with grammatical features of English, albeit to a lesser extent than in other languages. Cook and Newson (2007) compare the following two examples as evidence of this:

(7) Some professor believes [every student to have failed]

(8) Some professor believes [every student failed]

In the above, (8) is not ambiguous, but (7) is. It thus appears that, unlike the subject of a non-finite clause, the subject of a finite clause cannot have wide scope over a higher subject. In Chomsky's approach, LF is the level of syntactic representation that makes scope phenomena – and any other additional syntactic information that is not made apparent in the SS of the language in question, but is demanded for semantic evaluation – fully explicit.

Neale's proposal, made explicit in Neale (1993a), is that there is much to be gained from 'exploring the view that a fully worked out theory of LF will be a fully worked out theory of logical form' (ibid.: 95). Adopting LF representations as logical forms marks a substantial departure from the traditional philosophers' conception of logical form. LF representations ('LFs' for short) are syntactic representations. They posit a grammatical constraint on what philosophical logicians are licensed to postulate as logical forms. Admittedly this grammatical constraint is not as simplistic as the constraints ordinary language philosophy may have imposed, but all the same, it means that logical forms are constrained by syntactic theory, and as these are taken as the objects of semantic evaluation, we have a firm constraint on the semantics of the language studied. The claim that LFs are the vehicles for semantic evaluation in natural language semantics is often summarized as the 'LF hypothesis', stated by Larson and Segal (1995: 105) in this form:

LF hypothesis The level of logical form is where syntactic representation is interpreted by semantic rules.

In other words, as they put it, the level of LF is the 'interface between syntax and semantics' (ibid.). Aside from imposing constraints on the semantics, this means that the syntax must also be constrained to the extent that it must deliver something suitable for semantic evaluation. In the context of a truth-conditional semantic theory, this means that the level of LF representation must be 'suitable for compositional interpretation: it must provide an articulation of constituents allowing the truth-relevant contribution of the whole to be calculated from the truth-relevant contributions of its parts' (ibid.). Russell's incomplete symbols, interpreted as restricted quantifiers in LFs, must conform to these constraints also.

The previous discussion demonstrates that Neale's proposed relocation of logical form within syntactic theory, whether he intends it to or not, lends support to his defence of the theory of descriptions. With this proposal in place, Neale can appeal to independently motivated syntactic evidence to support the claim that descriptions are quantifiers. As we have seen, if one looks only to the semantic evidence, it is possible to arrive at Russellian truth-conditions without accepting this claim. The challenge posed to the theory of descriptions by a referential theory of descriptions coupled with a negative free logic, for example, can be easily diverted if one can point to syntactic facts which demand that we treat descriptions as quantifiers before we even confront the semantic data. However, by locating logical forms in a level of syntax

constrained in the ways just mentioned, Neale invites the accusation that he has abandoned Russell's central thesis. We will now turn to consider that accusation.

4.3 Incomplete symbols – the objections

There can be no doubt that Russell's himself understood logical form in a far more ontologically loaded sense than the sense one would want to apply to LF structures. For example, he writes: 'The study of logic ... is concerned with the analysis of logical *forms*, i.e. with the kinds of propositions that may occur, with the various types of facts, and with the classification of the constituents of facts' (Russell, 1914b: 109). Far from being the structures of sentences, on this account, logical forms are the structures of the facts that sentences represent.⁷ The claim that descriptions are 'incomplete symbols' has immediate ontological implications once it is coupled with this notion of logical form: put simply, descriptions do not survive the analysis of sentences containing them into their logical forms. The analysis of descriptive sentences into their logical forms *eliminates* the descriptions. This was the desired result that motivated the theory for Russell in the first instance. A number of commentators on Russell's theory have objected to Neale's revamping of it on the grounds that, by locating the arguments for it in the realm of syntax, Neale has effectively divorced the theory from its original (ontological) motivations. To remain faithful to Russell's theory, an account should issue logical forms for descriptive sentences that do not contain any constituents corresponding to the descriptions that feature in the original sentences, it is argued, and Neale is alleged to have failed to meet this requirement. Such is the conclusion reached, for example, by Bernard Linsky, who takes it as evidence that Neale is not fully endorsing Russell's theory after all: 'Neale asserts, then, that Russell was right about the truth-conditions for sentences with descriptions, but wrong about their logical form, since he denied that descriptions were constituents of logical form' (Linsky, 1992: 681).⁸

Is Neale disagreeing with Russell on the logical form of descriptive sentences? This seems to flatly contradict Neale's insistence that '[the $x: Fx](Gx)$ is *definitionally equivalent* to $(\exists x)((\forall y)(Fy \equiv x = y) \ \& \ Gx)$ ' (Neale, 1990: 45). Neale himself dismisses Linsky's objection as either an obviously false claim that Neale disagrees with Russell's account of the truth-conditions of descriptions (an interpretation which clearly cannot be supported in light of the above quotation from Linsky), or a 'trivially true' but 'uninteresting' complaint that Neale has abandoned

PM in favour of RQ (Neale, 2001: 231). This is unfair on Linsky, however. Linsky's point is that Neale is invoking a purely syntactic notion of logical form that cannot be easily substituted for Russell's notion without altering the content of Russell's theory. I suggested above that Russell (mistakenly) construed logical forms as recoverable by direct examination of the truth-conditions of sentences. Linsky appears to be in partial agreement with this claim, but he also perceives an equally crucial ontological component to Russell's notion of logical form:

The formalizations in the logic of *Principia Mathematica* provide the closest approach that Russell, long before Tarski's definition of truth, could have given to an account of truth-conditions. But there is much more to Russell's discussion of logical form than that. It is the other, more ontological, aspects of logical form, having to do with the form and unity of propositions and facts, that are of most significance for interpreting some of Russell's other notions such as that of an 'incomplete symbol'.

(Linsky, 2002: 396)

We can extract from Linsky's interpretation of Russell two reasons why he objects so strongly to Neale's account of logical form: (1) Russell's account of logical form is independent of the syntax of natural language, hence it cannot be assimilated to LF; and (2) the ontological aspects of Russell's notion of logical form are not captured by Neale's analysis: Russell's notion of logical form is clearly directly concerned with the truth-conditions, logical powers, and existential import of propositions, and indirectly if at all with the syntactic features of sentences expressing those propositions.

We have already seen, in the previous section, a good reason for abandoning (1) on Russell's behalf. Without an appeal to syntactic features of descriptions, and natural language quantifiers more generally, we are stripped of any knock-down objection to the view that descriptions are singular terms. To reiterate: the notion of scope will not do the work Russell wants it to do if it is drawn from semantics alone; unless scope is construed as a syntactic phenomenon, Russell's quantificational analysis of descriptive sentences will not be the only analysis capable of yielding the Russellian truth-conditions, as a negative free logic will also contain sentences displaying the same scope ambiguities as Russell's analysis predicts, despite taking descriptions to be singular terms.

It is not at all clear that if we follow Neale in abandoning (1) we are thereby departing from the spirit as well as the letter of the theory of

descriptions. The theoretical background to the postulation of LF as a level of syntactic representation was simply unknown to Russell. It is tempting to think that Chomsky's location of grammar within the actual psychology of speakers would have appealed to Russell's later attitude towards language.⁹ It does not fit well with the Platonist conception of logic and logical form Russell held in his early work. Nonetheless, the basic idea that sentences have different levels of syntactic structure which are to be uncovered by analysis is certainly not in any way incompatible with Russell's attitude towards language at this time. Ultimately, it is futile to speculate too far on how Russell might have responded to these doctrines that he was in fact unaware of. This still leaves the question of how to respond to (2).

Does Neale's presentation of the theory of descriptions divorce the theory from its ontological consequences? Certainly Neale is quick to distance himself from particular features of Russell's ontology and epistemology, insisting on the independence of the theory of descriptions from those features. For example, he states that the theory has no essential connection to Russell's sense-data epistemology and associated ontological commitments. It is hard to object to this. The theory of descriptions is a theory about which terms refer, not what they refer to. Similarly, Neale is surely right when he points out that the theory of descriptions is independent of Russell's doctrine that names are disguised definite descriptions. Linsky's objection, however, is not directed at Neale's departure from these particular ontological doctrines of Russell's. Rather, the heart of his objection is that logical forms themselves, and their constituents, both are, and represent, elements of Russell's ontology:

The lexical items to be inserted at the leaves of trees in logical form have significant ontological status for Russell. In contemporary LF they are simply the primitive words of the language. No assumption is made that each word corresponds to something in the world ... I propose that it would be important to him to choose the right logical terms to be primitive, as they would have to reflect elements of logical form in the world: 'the' does not name any such constituent. Neale rejects these aspects of Russell's view, thinking that he is dropping something incidental to his purposes. Instead, the difference between a syntactically primitive lexical item and an item corresponding with a genuine constituent of the world is a large one, and not one to be glossed over.

(Linsky, 2002: 404)

Neale's dismissal of Linsky's objection as founded on a confusion about the relative merits of the syntax of PM and RQ is therefore unfounded. However, in the next section, I shall argue that Linsky's claim that Neale is guilty of glossing over the difference between syntactic primitiveness and ontological import is also unfounded.

4.4 Incomplete symbols – responding to the objections

If one accepts Linsky's claim that Russell's logical forms carry ontological commitments, then it would seem to follow that Neale's attempt to assimilate Russell's logical forms to LFs will only be successful if it retains the same features. In other words, if Linsky is right about Russell's conception of logical form, the postulation of restricted quantifiers in logical forms will entail a commitment to entities in the world corresponding to them so long as Russell's conception of logical form has been retained. If it has not been retained, there will be no essential connection between RQ and the theory of descriptions.

Neale insists that quantifier expressions do not stand for entities of any kind: 'To say that a sentence *S* expresses a *general* proposition is just to say that the grammatical subject of *S* is not the sort of expression that stands for an object and does not contribute an object to the proposition expressed by (or the truth conditions of) an utterance of *S'* (Neale, 1993a: 89). It should be noted that, although he draws extensively on the insights of generalized quantifier theory as a means of extending quantification theory beyond the first-order quantifiers so as to capture natural language determiner phrases like 'most *Fs*', 'Few *Fs*', etc., Neale does not assign objects to the quantifier phrases of RQ in the semantics in the way that is common. It is common in work on natural language semantics to interpret restricted quantifiers by assigning to them generalized quantifiers in the manner explained in Chapter 2. For example, the semantic value of the restricted quantifier 'every *F*' is the set of all supersets of the set of *Fs*, and that of 'the *F*' is the set of all supersets of the singleton set of the unique object that is *F*.¹⁰

$$\begin{aligned} v(\text{"all } F\text{"}) &= \{X \subseteq U: \{x: Fx\} \subseteq X\} && \text{Df.} \\ v(\text{"the } F\text{"}) &= \{X \subseteq U: \text{for some } u \in U, \{x: Fx\} = \{u\} \text{ and } u \in X\} && \text{Df.} \end{aligned}$$

This greatly simplifies the statement of truth conditions for sentences containing restricted quantifiers. Neale does *not* endorse this interpretation of the quantifiers of RQ, however. This is made explicit in Neale (2001: 229–230). There he notes that while one is at liberty to employ the resources of generalized quantifier theory to provide a semantics for

RQ, one is not obliged to. Furthermore, Neale himself adopts a Tarskian semantics for the quantifiers of RQ, giving axioms such as:

$(\forall s)(\forall k)(\forall \phi)(\forall \psi) (s \text{ satisfies } \lceil [\text{some } x_k: \phi] \psi \rceil \equiv \text{some sequence satisfying } \phi \text{ and differing from } s \text{ at most in the } k^{\text{th}} \text{ place also satisfies } \psi).$
(ibid.: 43)

The use of this axiom for the RQ expression $[\text{some } x: \phi]$ does not invoke any set-theoretic values for the expression of the sort described above. Thus, there is no sense in which a set-theoretic, or any other kind of, object is being assigned to the expression. Neale therefore rejects the accusation that the syntax of RQ enforces any departure from the doctrine of incomplete symbols:

On neither the account of quantification assumed by Russell nor the Tarskian account I have borrowed here do quantificational noun phrases *stand for* things. And neither the move from unrestricted to restricted quantification nor the use of a systematic *notation* for restricted quantification magically makes quantificational noun phrases start standing for things.

(ibid.: 230)

This seems to show quite convincingly that Neale does not carry any commitment to entities stood for by the quantifiers, either consciously or otherwise. However, one might take this to further validate Linsky's claim that Neale has failed to remain faithful to a Russellian notion of logical form. Linsky's claim above was that Russellian logical forms have ontological consequences: if a lexical item occurs in the correct rendition of a Russellian logical form, it must stand for something in reality. But this does not seem to be the case for Neale's LF representations. Therefore, we might conclude, LFs are not logical forms.

To determine whether this conclusion should be embraced, we must examine Linsky's claim that the presence of an item in a Russellian logical form does indeed entail the presence of an item in Russell's ontology. The test case here will be the universal quantifier, for this does feature in Russellian logical forms, even those which are offered as candidates for the logical forms of sentences that do not contain an explicit universal quantifier. For example, descriptive sentences like 'the present king of France is bald' will have a universal quantifier in their logical forms. Thus, if Linsky is correct, some entity must correspond to the universal quantifier on Russell's account.¹¹ Linsky (2002: 404) does in fact make

this claim, arguing that Russell drew distinctions between the universal and existential quantifiers and the definite article, holding the first only to contribute an item to logical forms, whereas the other two were to be eliminated on analysis.

The main problem with this interpretation is that it separates Russell's account of definite descriptions from his wider theory of denoting in a way that does not appear to fit with Russell's statement of the theory. The theory of descriptions is not just a theory of definite descriptions, but also a general theory of denoting within which the account of definites is one component. According to 'On Denoting', universally and existentially quantified phrases are also included on the list of denoting phrases:

By a 'denoting phrase' I mean a phrase such as any one of the following: a man, some man, any man, every man, all men, the present king of France, the present king of England, the centre of mass of the solar system at the first instant of the twentieth-century, the revolution of the earth round the sun, the revolution of the sun round the earth.

(Russell, 1905c: 41)

The claim made in 'On Denoting', and by the theory of descriptions more generally, is that *all* denoting phrases are incomplete symbols: '*Everything, nothing, and something* are not assumed to have any meaning in isolation, but a meaning is assigned to *every* proposition in which they occur' (ibid.: 42). None of the above phrases, including the universal quantifier expressions, has any meaning in isolation. As the universal quantifier clearly does occur in the logical forms of certain propositions on Russell's theory, Linsky's requirement that an incomplete symbol should not feature in any Russellian logical form is overly restrictive.

What does Russell mean when calls an expression an incomplete symbol if not that it does not occur in logical form? The only plausible explanation remaining is that the expression does not contribute an *object* to the propositions (or truth-conditions) that sentences it features in are used to express. Indeed, this is the most obvious interpretation of many of the arguments Russell gives to show that descriptions are incomplete symbols. Consider, for example, the following argument from *Principia*, which is worth quoting in full:

[I]t can easily be shown that $(ix)(\phi x)$ is always an incomplete symbol. Take, for example, the following proposition: 'Scott is the author of Waverley.' [Here 'the author of Waverley' is $(ix)(x \text{ wrote Waverley})$.]

This proposition expresses an identity; thus if 'the author of Waverley' could be taken as a proper name, and supposed to stand for some object c , the proposition would be 'Scott is c .' But if c is anyone except Scott, this proposition is false; while if c is Scott, the proposition is 'Scott is Scott,' which is trivial, and plainly different from 'Scott is the author of Waverley.' Generalizing, we see that the proposition

$$a = (ix)(\phi x)$$

is one which may be true or may be false, but is never merely trivial, like $a = a$; whereas, if $(ix)(\phi x)$ were a proper name, $a = (ix)(\phi x)$ would necessarily be either false or the same as the trivial proposition $a = a$. We may express this by saying that $a = (ix)(\phi x)$ is not a value of the propositional function $a = \gamma$, from which it follows that $(ix)(\phi x)$ is not a value of γ . But since γ may be anything, it follows that $(ix)(\phi x)$ is nothing. Hence, since in use it has a meaning, it must be an incomplete symbol.

(Whitehead and Russell, 1925: 67)

Turning a blind eye to the frequent use/mention slips made in this passage, the only way to make sense of the argument is as an argument about whether or not a description that Scott answers to contributes him to propositions expressed by sentences containing it. All that the argument (if indeed it is sound) establishes is that such descriptions do not contribute Scott to those propositions. In short, the argument merely concludes descriptions do not contribute objects to propositions: descriptive sentences are object-independent. But this is precisely what Neale takes the mark of an incomplete symbol to be. No objects are required by the truth-conditions of quantificational sentences. This much is true of both sentences of the form 'all Fs are Gs' and sentences of the form 'the F is G'. Russell, it is true, never went so far as to explicitly state that 'the' is a quantifier, like 'all'. But, in light of the above discussion, this addition to the theory seems entirely appropriate: if expressions that Russell recognized as quantifiers were included in his list of incomplete symbols, it cannot be distorting his claim that definite descriptions are incomplete symbols to assimilate them also to quantifiers. Assimilating definite descriptions to quantifiers serves to clarify the theory of descriptions, not to depart from it.

Thus far, I have argued that Neale's extension of the theory of descriptions serves to both clarify and strengthen the theory in comparison to Russell's original statement of it. It clarifies the theory by assimilating

descriptions to quantifiers. It also strengthens the theory by identifying logical forms with LFs and thus relocating the philosophers' notion of logical form in the domain of syntax. This strengthens the theory, I have argued, because the semantic data alone are not sufficient to demonstrate the correctness of a quantificational analysis of descriptions. This raises a more general question about the relation between semantics and syntax that I want to briefly consider before I continue, in the next section, with the specific discussion of the status of the theory of descriptions.

In important recent work, John Collins¹² has launched a barrage of objections at the view that propositional structure can be supplied by syntactic structure. Collins' objections amount to an overarching complaint that the account of syntax assumed by philosophers of language who wish to invoke it in support of an account of propositional structure is theoretically naïve: generative linguistics issues forth syntactic structures that simply do not conform to the picture assumed by philosophers of language. In particular, the structures it yields do not conform to the structural requirements of truth-conditional (i.e. propositional) semantics. This would appear to pose a threat to the assimilation of logical form to a level of syntactic structure that I am advocating here, for the primary role of logical forms in Russell's philosophy is to deliver propositional structures.

Collins gives a number of arguments to support his claim. Firstly, there is nothing essential to generative theories of syntax that requires a level of structure corresponding to logical form: Chomsky's more recent 'minimalist' programme does not endorse any such level, for example. Secondly, the most important category from the point of view of the truth-conditional semanticist, namely the sentence, is effectively redundant in contemporary syntactic theory. A phrase, such as a VP, NP, etc., has its category determined by its constituents: a verb-phrase is headed by a verb, a noun-phrase by a noun, and so on. But there is no such element of a sentence that determines its category. Thus categorizing a sentence as a sentence is nothing more than a stipulation, making the sentence anomalous as a phrase category. This is obviously theoretically unsatisfactory. Furthermore, if we take the sentence as a category of this anomalous sort, we have no category in our linguistic construction for tense and agreement to contribute to. The obvious solution is to replace the notion of a sentence with that of a tense phrase, thus simultaneously providing a category that is determined by its constituents and providing a phrasal category for tense and agreement to head. It might be thought that this is only a minor obstacle – can we not take

these tense phrases as the vehicles of propositional content? After all, as we shall see in Chapter 6, there is good reason to think that verb tense is best interpreted as corresponding to a discrete constituent at LF. This, however, brings us on to Collins' third, and most pressing, objection. The problem is, according to Collins, that: 'According to theories of the past fifteen years or so, *every* full clausal structure involves some *movement* or *copying*, which produces a surplus of elements relative to property instantiation of the kind apparently required for propositional structure' (Collins, 2007: 812). In short, there are demands on syntax that are not made on semantics and, as a consequence, the structures delivered by syntax will be more complex than semantics requires. The hope that generative syntax would provide semantics with the structure lacking in surface grammar backfires, according to Collins, because generative syntax *over-generates* from the point of view of semantics. Syntactic operations of the sort that originally helped with accounting for issues like quantifier scope phenomena do not always occur in ways that are semantically significant. Thus they yield additional structure that is superfluous to semantics. To take an example of Collins', verb raising, which is widely held to hold for all transitive verbs, is accounted for by a structure which copies the verb and its agent. A simple sentence like 'Bill loves Mary' will therefore have an LF structure in which Bill and love are copied, according to best current theory. If we take this LF to be the structure of the proposition it has a structure that is unnecessarily baroque, which we might paraphrase as something like 'Bill is a Bill that loves and the loving is of Mary'. This may be truth-conditionally equivalent to 'Bill loves Mary', but the additional, superfluous, structure here makes a mockery of any appeal to syntax as a template for propositional structure (see Collins, 2007: 823).¹³

How does Collins' objection bear on our concerns? Does it show that the Russellian approach to semantics is ill founded? Certainly, it poses a serious challenge to those, like King (2007), who want to make a direct appeal to the LF structures of generative syntax to explain the structure of propositional content. For King, propositions are structured the way that they are by virtue of being expressed by linguistic items that are structured in the way that they are at LF. For example, what gives the proposition that Rebecca swims the structure it has is that an expression having Rebecca as its semantic value, and another expression having the property of swimming as its semantic value, are related by a syntactic relation *R*. It is this syntactic relation that King thinks structures and unifies the proposition (see King, 2007: 30). But, if Collins is right, the available syntactic relations will provide a great deal more

structure than, intuitively, we expect from *R*. Indeed, even before we consider the specific problem of structural over-generation, King's view has some highly counter-intuitive consequences. For example, a number of syntactic transformations intuitively understood as having no semantic significance, such as passivization, will result in distinct propositions. King is apparently happy to bite the bullet when it comes to such cases. For example, he accepts as a consequence of his theory that 'Laura is happy and Scott is sad' expresses a different proposition to that expressed by 'Scott is sad and Laura is happy', and even that ' $2=1$ ' and ' $1=2$ ' express different propositions (*ibid.*: 95). King tries to allay the concerns that we may have about the counter-intuitiveness of his position. Even if he is successful, however, Collins' argument suggests that these cases are just the tip of the iceberg. For even if King is able to persuade us to accept that ' $2=1$ ' means something different to ' $1=2$ ' (despite their co-extensionality), it is a much harder job to persuade us that 'Bill loves Mary' does not mean the proposition that Bill loves Mary but means instead the proposition that Bill is a Bill that loves and the loving is of Mary.

What conclusion should be drawn from Collins' argument? Collins thinks it shows that the whole project of truth-conditional semantics is doomed:

Put in radical terms, it is the very Frege–Russell conception of meaning as propositional (as truth conditions) that is at fault. Given the empirical mismatch and the need to explain how meanings are paired with structures, we should not take our inherited ideas to be a constraint on our linguistic theorizing. In short, as revealed by generative inquiry, it looks as if language narrowly construed is just not in the business of expressing propositions.

(Collins, 2007: 807–808)

This is a striking conclusion. But without additional premises, not provided in his paper, it does not follow from Collins' argument. All that follows from the arguments actually given is that syntax does much more than provide the right structures for truth-conditions – additional structure is present which is not relevant to truth-conditional semantics. But that merely shows that the question of the relation between syntax and semantics is not fully answered yet; it does not show that there is no such relation. Bearing in mind the ubiquity of truth-conditional content in language, it is likely that there is some systematic relation between the two. What Collins shows is that the systematic relation is not as simple

as suggested by King. LF doesn't just provide propositional structure; it provides more besides. But this does not defeat the claim that it *does* provide propositional structure, only the stronger claim that it *only* provides propositional structure, or, more precisely, that propositional structure and logical form are identical. King is committed to this stronger claim. Russell may also have thought it true – his remarks on logical form seem to suggest that he did – but if we substitute Russell's conception of logical form for a linguistic one, as I am urging, there is no reason why we should maintain any commitment to this identification of propositional and syntactic structure. It is open to us and, in light of Collins' arguments, sensible to concede that the provision of propositional structure is only one function of LF structures.¹⁴ As Collins himself says: 'The basic idea that syntactic structure has an inherent duality, with one aspect dealing with propositional structure, is not a daft idea at all; it is probably true. The present point is simply that how this duality appears to play out precludes the recovery of a level of syntax that codes just for propositional structure, at least if that notion is intimate with that of truth conditions' (Collins, 2007: 819–820). The relationship between syntax and semantics appears a great deal more sophisticated than philosophers of language have tended to presume, and its details remain largely unknown. While this undoubtedly means that we should be cautious in our appeals to syntax as a new and better home for the Russellian notion of logical form, it does not mean that we should abandon the idea that logical form can, and should, be construed linguistically.

Returning to the main discussion of this chapter, I have thus far defended Neale's assimilation of descriptions to quantifiers, and of logical forms to LFs. In the next section, I will argue that other considerations regarding the syntax of descriptive sentences provide compelling grounds for making a further modification of the theory of descriptions. Ironically, the modification in question is precisely that which Linsky accuses Neale of making, namely the assignment of unitary meanings to definite descriptions (and the other quantifiers). I have argued that Linsky's accusation is unfounded: Neale does not modify the theory in this way. I will now argue, however, that Neale should have made the modification, and that had he done so, this would also have served only to improve, not distort, the theory of descriptions.

4.5 Incomplete symbols and object independence

The motivation for the shift from PM to RQ, as stated in Neale (1990), is the need to forge a closer connection between logical form and

'the superficial syntactical structures of English sentences' (ibid.: 40). Two arguments are given there to show that the relationship between the syntax of PM and English is problematic. Firstly, as discussed in section 2 above, PM introduces new lexical items into a sentence's translation that do not correspond to any existing lexical items in the original sentence. This is symptomatic of a lack of any systematic mapping from the syntax of English to PM that is especially vivid, as we saw above, if we compare the translations of, say, 'every king of France is bald' and 'the king of France is bald', each of which have the same phrase structure in English, but differ strikingly when translated into PM. Secondly, there are natural language quantifiers that cannot be translated into PM. Take, for example, the English quantifier word 'most'. Not only can this not be translated as a complex quantifier composed of a combination of universal and existential quantifiers (as 'the' is in PM), but even if we added the quantifier expression 'MOST' to PM, giving formation rules to permit formulas of the form $(\text{MOST } x)(Fx)$, which are to be interpreted as true if and only if more than half the objects in the domain of quantification are F , we will still find that many English sentences resist translation into the resulting language. Consider the sentence: 'Most Manchester United players are wealthy.' The quantifier $(\text{MOST } x)$ must bind the variables in an open sentence that translates both the predicates 'is a Manchester United player' and 'is wealthy'. The syntax of PM dictates that a logical connective is required to effect this. Let '@' be such a connective, yielding:

$$(\text{MOST } x)(\text{Manchester United player } x @ \text{wealthy } x)$$

The problem is that none of the existing connectives of PM is adequate to play the role of '@'. The connective '&' cannot be '@' as this would make the above sentence true if and only if most things are both Manchester United players and wealthy, which is not what the original sentence means. Nor can '⊃' be '@', as this would mean that the sentence is true if and only if most things are wealthy if they are Manchester United players, but as most things are *not* Manchester United players, most things are wealthy *if* they are Manchester United players, on the classical semantics bestowed on PM's '⊃' (see Neale, 1990: 40, also Wiggins 1980).

The source of both of these problems is the same: that quantifiers are unrestricted in PM whereas they are typically restricted in English. 'Most Manchester United players are wealthy' makes a claim about most

Manchester United players, not most *things*. This is why the additional lexical items are required in the PM translations, to connect together the open sentences that provide the necessary restrictions and which are then bound by the quantifiers in an attempt to capture the right truth-conditions. This is truth-conditionally adequate for the classical quantifiers (i.e. the universal, existential, and other quantifiers defined as complexes of them), but it fails for others, like 'most'. The solution to both problems, therefore, is to employ the restricted quantifiers of RQ.¹⁵ The following formula of RQ is true just in case the number of *Fs* which are *Gs* exceeds the number of *Fs* which are not *Gs*:

$$[\text{most } x: Fx](Gx)$$

It should be noted that, while the issue here is one about the syntactic relationship between the language employed for the statement of logical forms and the language whose sentences' logical forms are being captured, the cause of the concern over this is, at least partially, semantic. It is because PM does not contain any formula that can be interpreted as having the same meaning as 'most Manchester United players are wealthy' that its syntax is deemed inadequate. One of the great benefits of generalized quantifier theory is that it reconnects the semantics of quantifier phrases with their syntax, by respecting the common occurrences of quantifiers (and determiners in general, if indeed any determiners are not quantifiers) as constituents of determiner *phrases*, rather than lexical items that occur in isolation. Furthermore, we can even go on to provide precise semantic values for the determiners themselves, in the form of functions from sets of individuals to generalized quantifiers. For example, for a domain *U*, the semantic value of the determiner 'all' is a function from any set of individuals *X* to the set of all subsets of *U* which are supersets of *X*.

Why, then, does Neale refuse to assign generalized quantifiers as the semantic values of the restricted quantifier expressions of RQ? The only plausible answer, so far as I can tell, is that he is not prepared to abandon the doctrine that quantifiers, and descriptions in particular, are incomplete symbols. The discussion conducted in the previous sections of this chapter shows, however, that there is nothing to be gained by refusing to admit generalized quantifiers as the semantic values of the quantifier expressions of RQ. Furthermore, as we have just noted, there is much to be lost by the refusal.

There is nothing to be gained by refusing to assign generalized quantifiers to the quantifier expressions of RQ because, as we saw in the last

section, the key insight motivating Russell's talk of 'incomplete symbols' is the realization that descriptive (like other quantificational) sentences do not express object-dependent propositions. Quantifiers are incomplete symbols because they do not contribute objects to propositions (or truth-conditions). But Russell is mistaken, and Neale follows him in making the same mistake, in thinking that this means that quantifier expressions, including descriptions, do not have *meanings*. These two notions of object-independence and meaninglessness are quite distinct from one another. This is obvious enough from an examination of the passage in Frege's *Grundlagen Der Arithmetik* often cited as the first suggestion of the analysis of quantifiers as generalized quantifiers. Frege suggests that the sentence 'All whales are mammals' should be understood as being about the concepts *whale* and *mammal*, and that the universal quantifier expresses a relation between these concepts, namely that of *subordination*: the sentence says that the concept whale is subordinate to the concept mammal (by which Frege simply means that $\{x: x \text{ is a whale}\} \subseteq \{x: x \text{ is a mammal}\}$). Having made this point, he immediately goes on to lucidly illustrate the object-independence of the proposition expressed by the sentence:

It is true that at first sight the proposition 'All whales are mammals' seems to be not about concepts but about animals; but if we ask which animal then are we speaking of, we are unable to point to any one in particular. Even supposing a whale is before us, our proposition still does not state anything about it ... As a general principle, it is impossible to speak of an object without in some way designating or naming it; but the word 'whale' is not the name of any individual creature ... However true it may be that our proposition can only be verified by observing particular animals, that proves nothing as to its content.

(Frege, 1884: 60–61)

Frege, of course, did not assimilate descriptions to quantifiers and held them to be expressions which do 'designate' individuals as their semantic values. Hence, he would not have made the same points about descriptive propositions. But that is beside the point: the point made in the passage is a general one about the object-independence of propositions expressed by quantificational sentences. If one does think that descriptive sentences are quantificational, the same point will hold of them. Obviously, however, this does not exclude the possibility of analysing 'all whales' as expressing a generalized quantifier, as Frege is suggesting that very possibility in the same passage.

4.6 Conclusion

Neale's outright dismissal of Linsky's criticisms is evidence of the dramatic departure that current philosophers of language have taken from Russell's original conception of logical form. Linsky is certainly correct to point out the extent to which a Chomskyan conception of logical form differs from a Russellian one. Nonetheless, the central argument of this chapter has been that the shift from a conception of logical form derived from ontological and semantic considerations, such as Russell's, to a syntactically driven one of the sort proposed by Chomsky and endorsed by Neale is to the benefit, not detriment, of the theory of descriptions.

It is worth reminding ourselves that the sophisticated accounts of logical form offered by current syntactic theory were not available to Russell even in prototypical form. Linguistic theory as we know it today has its roots (at least in part) in the work of Russell. Consequently, he was in the position of pioneer in his treatment of logical form. The clear demarcation of syntax and semantics that is needed to facilitate Chomsky's theory of universal grammar is not properly recognized by Russell. What Russell did recognize, clearly, was that there is a level of structure to what we say that is not evident in the sentences we use to say what we say. This structure is revealed by distinctively logical features of what we say – inferential links between the meanings of different sentences, and so on. Thus, it is quite correct to call this logical form. Russell's sensible response to this phenomenon was to conclude that the meanings of sentences must have the structural properties needed to facilitate these logical features. Thus he concluded that logical forms were the forms of propositions. With syntax construed as a feature of the way that words are explicitly concatenated in ordinary sentences, it seemed obvious that logical form was not part of the syntax of natural language. Thus, he concluded that logical form, logical syntax, must be non-linguistic – a feature of propositions only, not the sentences that express them.

This pioneering view undoubtedly has the ring of genius to it. Few ideas have been more influential, or beneficial, in recent philosophy. But to refuse to further refine it in light of the advances that have been made in the following century in linguistic theory is to consign the theory to the status of a historical curiosity. What Chomsky's work on syntax facilitates, if we embrace it, is the incorporation of Russell's insights into a linguistic conception of logical form through the recognition that what goes on in the surface grammar of a sentence is not the end

of the story regarding its syntactic properties. Russell's recognition that propositions have a logical form that is not always revealed by surface grammar can be retained and strengthened by this syntactic theory which, unlike Russell's own account of logical form, provides a systematic method for determining the logical form of a proposition from the sentence that expresses it.

Russell's non-linguistic conception of logical form has not been the only casualty of this chapter. The claim that descriptions are incomplete symbols has also been rejected. Again, however, the rejection here has not led to a rejection of the theory of descriptions but an attempt to improve it. Once we recognize that assigning determinate meanings to quantifiers does not entail the assignment of *objects* to those expressions in anything like the way that objects are assigned to referring expressions, we can see that the move poses no threat to the claim that quantified propositions are object-independent. The notion of object-independence, I have argued, captures Russell's metaphysical intent better than his own notion of an incomplete symbol. Thus, especially in light of advances in our understanding of the semantics of quantifiers through generalized quantifier theory, we would be wise to abandon the claim that descriptions (and quantifiers in general) are incomplete symbols, maintaining simply that quantified propositions are object-independent instead.

5

Extending the Theory I: Complex Demonstratives

5.1 Complex demonstratives and the orthodox view

Complex demonstratives¹ are phrases like ‘that woman’, ‘this book’, ‘that man wearing the polka dot trousers’, ‘those rocks’, ‘these apples’, ‘those apples that you left on those rocks beside that man wearing the polka dot trousers’, and so on. Syntactically, they are determiner phrases. When we consider the semantic profile of complex demonstratives, however, things do not appear to be as straightforward as they are with the standard class of determiner phrases. All of these (under the assumption that definite descriptions are quantifiers) are quantifiers. A distinguishing semantic feature of a quantifier expression, as we have seen in previous chapters, is that it does not contribute an individual object to the truth-conditions of a proposition in the way that a referring expression does. Quantified propositions are object independent.

Although complex demonstratives seem to share the syntactic profile of determiner phrases, they have an obvious semantic similarity with demonstrative pronouns, namely that utterances of them are often accompanied by a demonstration. As this demonstration picks out an object, we seem to have good grounds to think that complex demonstratives, like their simple counterparts, contribute objects to propositions. This poses a puzzle, however, for if we also admit that the nominal material (which, following Borg, 2000, I will call the *matrix*) of the complex demonstrative plays a semantic role in the utterance, we have two elements of the complex demonstrative capable of picking out an object, and it is quite plausible that they might pick out *distinct* objects in the same utterance. Consider the following example from Larson and Segal (1995: 213). An utterance of the sentence ‘that fox is making a terrible mess’ may be uttered in a context in which a fox, making a

terrible mess, is demonstrated by the agent of the utterance; or it may be uttered by an agent in a context in which a badger, making a terrible mess, is demonstrated by the agent of the utterance (who, for whatever reason, has mistaken it for a fox). The point is that if the semantic value of the complex demonstrative 'that fox' is the demonstratum of the utterance, then both utterances are true. If the semantic value of the complex demonstrative is whatever satisfies the matrix (perhaps in addition to being demonstrated in the context), then the two utterances clearly have different truth-conditions.

What I will call the *orthodox view* holds that complex demonstratives are devices of direct reference. This view clearly does not allow for the matrix to play a role in the semantics of the expression, for if it were to impose a descriptive constraint on what counts as semantic value of the expression then this would not be a case of direct reference. The orthodox view thus holds that the truth-conditions of the sentence 'that fox is making a terrible mess', uttered in a context *c*, are roughly as follows:²

<That fox is making a terrible mess, *c*> is true (at *w*) iff the demonstratum of *c* is making a terrible mess in *w*.

The alternative view, incompatible with the orthodox view, that I shall defend in this chapter, is that the truth-conditions of the sentence, uttered in a context *c*, are roughly as follows:

<That fox is making a terrible mess, *c*> is true (at *w*) iff the demonstratum of *c* is **a fox** and is making a terrible mess in *w*.

This view naturally motivates a quantificational account of complex demonstratives, such as that developed by King (1999, 2001, 2008a, 2008b). Others have rejected the orthodox view without endorsing a quantificational view. Non-quantificational deviations from the orthodoxy include Borg (2000), Lepore and Ludwig (2000) and, it sometimes seems, Kaplan (1989a, 1989b). Variations on the orthodox view are defended by, among others, Schiffer (1981), Perry (1997) Braun (1995, 2008a, 2008b), Larson and Segal (1995), Salmon (2008) and, it sometimes seems, Kaplan (1989a, 1989b).

Defenders of the orthodox view are not wholly insensitive to the intuition that something has to be a fox to be the semantic value of an utterance of 'that fox', as we can see in the passage from Larson and Segal where the example is introduced:

As an empirical test, consider the following situation. You and a friend come home late one night to find a badger rummaging through your

garbage bin, spreading trash all over the yard. You mistake it (the badger, not the bin) for a fox and say [A], gesturing at the animal:

[A] That fox is making a terrible mess.

What (if anything) did you refer to with your utterance of *that fox*? And was what you said true or false? Our intuitions are not entirely clear on this point, but they tend toward the judgment that in uttering *that fox*, you referred to the badger. Even though the animal in question was not a fox, you still succeeded in picking it out with your utterance. Furthermore, your utterance of [A] was true. Although the animal was not a fox, the state of your yard was enough to verify the sentence.

(Larson and Segal, 1995: 213).

Of course, as we have just seen, Larson and Segal really have no choice but to maintain that the imagined utterance of [A] is true once they have bestowed reference-fixing powers on the demonstration accompanying the utterance. Despite their admission that their 'intuitions are not entirely clear on this point' they proceed to establish an axiom for complex demonstratives in their truth-theoretic semantic theory that makes the reference wholly determined by the demonstration, leaving the matrix semantically redundant.

The orthodox view is not without theoretical cost. Even a fairly weak compositionality principle will be violated by the orthodox view. If we phrase the principle as the general thesis that the meaning of any sentence is a function of the meaning of its parts, then we clearly have a counter-instance to it on the orthodox interpretation of complex demonstratives.³ Like other proponents of the orthodox view, Larson and Segal hope to alleviate any concerns about this semantic redundancy by maintaining that the matrix can play a pragmatic role, assisting the agent of the utterance's audience in locating the agent's intended referent. However, this seems to be no more than a gesture towards an explanation of the role of the matrix, rather than a convincing account that could satisfy one troubled by the above concerns.

Although, as we shall see, no position in this debate over the semantics of complex demonstratives seems plausible unless it draws quite heavily on pragmatics, we have a strong *prima facie* reason to be suspicious of this particular attempted pragmatic supplementation of the orthodox view. No other phrase with the syntactic form of a determiner phrase behaves in quite this way. The most obviously similar is the widely noted phenomenon of referential uses of definite descriptions. Kripke

(1979) suggested that these should be explained pragmatically rather than semantically. In a case where a definite description 'the F' is used referentially it can refer to an object that is not F. But if 'the F' is a quantifier expression of the form [The x : Fx] then the matrix of the quantifier introduces a condition that must be met by any prospective value of the variable x in the expression. Kripke suggests that in cases where 'the F' is used to refer to some non-F, the sentence used may very well be false, but *what the speaker meant* may be true. This suggestion has been endorsed by many. But it is importantly different to the above-suggested modification to the orthodox theory of complex demonstratives. In the case of referential descriptions, expressions continue to systematically contribute their meanings to the propositions expressed by sentences containing those expressions. It is just that speakers are sometimes able to communicate something other than what their sentences literally mean. But the proposed modification for complex demonstratives has it that whenever a demonstrative is attached to descriptive material, it systematically *cancels* the meaning of the descriptive material while somehow transposing the meanings of the words outside of the semantics of the expressions and into the realm of their pragmatic employment. This is both *ad hoc* and frustratingly sketchy. It is *ad hoc* because a special case is being made for demonstrative determiners; it is sketchy because it seems to offer just a vague gesture towards pragmatics without any detailed account of how the pragmatics of the utterance perform this transposition of the normally semantic to the occasionally pragmatic. This is quite different to the story about the pragmatics of referential descriptions that is firmly anchored in the speech act theory of Gricean conversational implicature.^{4,5}

In addition to these more general concerns about the implications of the orthodox view for semantic and syntactic theory and the relation they bear to one another, it has been pointed out in some detail by King (2001) that there seem to be numerous syntactic and semantic data that cannot be easily accounted for on the orthodox view. In the next section I will assess the syntactic evidence mustered by King against the orthodox view. In the following section, I shall consider some of the most striking semantic data against the orthodox view, including those presented by King.

5.2 Syntactic data against the orthodox view

A syntactic property of quantifiers, not shared by referring expressions, is that they undergo *movement* in the mapping of a sentence to its LF

representation. For example, the (surface syntactic) ambiguity of the sentence 'every teacher shouted at a student' is explained by its being associated with two non-ambiguous syntactic representations. These representations move the quantifier expressions 'every teacher' and 'a student' in different ways, as in the following:

- (1) $[s[_{NP}\text{every teacher}]_1 [[[_{NP}\text{some student}]_2 [s e_1 \text{ VPshouted at } e_2]]]$
- (2) $[s[_{NP}\text{some student}]_2 [[[_{NP}\text{every teacher}]_1 [s e_1 \text{ VPshouted at } e_2]]]$

The 'e' in these representations is a *trace* left behind by the quantifier that has been moved to a position that disambiguates its scope. The trace acts as a variable, bound by the quantifier it is co-indexed to. There are a number of tests that can be performed to detect movement phenomena. One concerns verb phrase (VP) deletion. VP deletion is the phenomenon whereby a verb is used once and then dropped when used again in the same clause. For example, the VP 'liked' is deleted in (3) (and reinstated in (4) to illustrate the phenomenon:

- (3) John liked every song that Mary did
- (4) John liked every song that Mary liked

King (2001: 17) notes that a condition on VP deletion is that neither the deleted verb, nor its antecedent, should stand to each other in the relation of *c-command*. An expression e_1 c-commands an expression e_2 if and only if, in a phrase structure tree for the sentence in which they feature, the first branching node that dominates e_1 also dominates e_2 . If we restrict our attention to the SS of (3) it appears that we have a violation of this condition. But once we turn to the LF representation, the movement of the quantifier phrase 'every song' ensures that the condition is met. The parallel between (3) and (5) appears to support the claim that complex demonstratives undergo movement and hence are quantifiers:

- (5) John liked that song that Mary did

It should be noted (as King, 2001: 175 nt. 16 does) that this evidence is also inconclusive, as some (e.g. Hornstein, 1995; Larson and Ludlow, 1993) have suggested that names may also undergo movement; hence the detection of movement by complex demonstratives may not prove their quantificational status. All the same, the phenomenon detected by King here surely poses a challenge to the orthodox view of complex demonstratives that is sufficient to cast some doubt on that view.

King also points out that so-called weak crossover effects seem to be introduced by complex demonstratives, again suggesting that they are to be classed as quantifiers. There is no acceptable reading of (6) below on which the pronoun 'his' is anaphoric on the quantifier phrase that follows it:

- (6) His mother loves some man

This is also the case when the determiner 'some' is replaced by any quantifier. Yet, replacing the quantifier phrase by a proper name yields a reading on which the pronoun can be anaphoric on this name:

- (7) His mother loves John

Again this phenomenon seems best explained by the fact that quantifiers, unlike referring expressions, undergo movement in the mapping to LF representations. Once again, King maintains that complex demonstratives appear to side with quantifiers in this respect:

- (8) His mother loves that man

It is, I think, less certain that 'his' cannot be anaphoric on the complex demonstrative in (8) than that it cannot be anaphoric on the quantifiers in (6). It is possible to imagine contexts in which (8) does not seem to produce the result that King expects. For example, if I am sitting in a bar with a friend and a man enters the bar wearing a t-shirt emblazoned with the slogan, 'my mum went on holiday to London and all she got me was this lousy t-shirt', my sarcastic utterance of (8) seems to be a felicitous instance where the pronoun 'his' is anaphoric on the complex demonstrative. As with the VP-deletion example, however, it certainly seems fair to say that King has again raised a challenge that the orthodox view owes a response to, even if it is not entirely conclusive.

In addition to these syntactic considerations, King has pointed out a number of semantic examples that seem very hard to make sense of on a direct reference semantic theory, and these again naturally lend support to a quantificational analysis. These provide perhaps the most convincing counterexamples to the orthodox theory. I turn now to discussion of them, along with some other considerations regarding the semantics of complex demonstratives.

5.3 Semantic data against the orthodox view

A striking semantic feature of determiner phrases is that they can be classified according to their *monotone direction* properties.⁶ As applied

to the semantics of quantifier phrases, monotone direction properties are relations between sets that are the extensions of either the noun expression contained in the determiner phrase, or the verb phrase that the determiner phrase is conjoined with to form a clause. For example, in 'some women walk', the monotone direction properties of the quantifier 'some' will be detectable in certain properties of the sets that are the extensions of the common noun 'women' or the verb-phrase 'walk'. Using Q to signify a quantifier, N to signify the noun that the quantifier is concatenated with in a determiner phrase, VP to signify the verb phrase making up the remainder of a clause, and $|e|$ to signify the set of things in the extension of an expression e , we can distinguish the following four monotone direction properties:

1. A quantifier Q is **left (or subject) monotone increasing** iff $[QN_1 VP]$ entails $[QN_2 VP]$ (where $|N_1| \subseteq |N_2|$) e.g. *some* but not *every*.
2. A quantifier Q is **right (or predicate) monotone increasing** iff $[QN VP_1]$ entails $[QN VP_2]$ (where $|VP_1| \subseteq |VP_2|$) e.g. *every* but not *no*.
3. A quantifier Q is **left (subject) monotone decreasing** iff $[QN_1 VP]$ entails $[QN_2 VP]$ (where $|N_2| \subseteq |N_1|$) e.g. *every* but not *some*.
4. A quantifier Q is **right (predicate) monotone increasing** iff $[QN VP_1]$ entails $[QN VP_2]$ (where $|VP_2| \subseteq |VP_1|$) e.g. *no* but not *every*.

Neale (2004: 133–134) points out that complex demonstratives display some characteristic monotone direction properties of the other, recognizably quantificational, determiner phrases. However, as he notes (*ibid.*: 134 ft. nt. 89), complex demonstratives seem to be more complicated in respect of these properties than other determiners. This complexity could be appealed to by the orthodox theorist as grounds for treating complex demonstratives as semantically unlike other determiner phrases. Furthermore, the evidence here is inconclusive as expressions that are uncontroversial devices of direct reference such as proper names also display monotone direction properties to some extent (see Partee et al., 1990: 380 ff.). Indeed this is unsurprising for, as Barwise and Cooper (1981) show, names can be assigned generalized quantifiers in a semantic theory anyway.⁷ Whatever data there are regarding the monotone direction properties of complex demonstratives seem inconclusive, therefore.

I turn now to the semantic data presented by King (2001). They can be divided into three sorts. The first are what King calls *NDNS* (no demonstration, no speaker meaning) cases. These are cases where the speaker using the complex demonstrative neither demonstrates

something physically present as the intended referent of the expression, nor even has a particular object in mind as the referent. Here is one of his examples. In a lecture on hominid history, the lecturer introduces the topic of the discovery of how to start fires. He then says:

- (9) That hominid who discovered how to start fires was a genius

The lecturer's use of the complex demonstrative here is an NDNS use: he employs no demonstration and has no particular individual in mind. Why do these cases pose problems for the orthodox theory? Let us suppose that in the actual world Homey the hominid discovered how to start fires and was indeed a genius. The proposition expressed by the lecturer's utterance of (9) is thus true in the actual world. But now consider a world w_1 in which Homey, still a genius, was beaten to the discovery by Shomey, the imbecilic Hominid who stumbled on the correct procedure by simple luck. The proposition expressed by the lecturer (in the actual world) is false in w_1 . It thus seems that the complex demonstrative, as it occurs in this example, is not a rigid designator and therefore not a device of direct reference.

The second sort of case is what King calls *QI* (quantification in) cases. These are cases where a complex demonstrative contains a pronoun anaphoric on a quantifier phrase in which scope the complex demonstrative occurs, as in:

- (10) Every father remembers that day when his first child was born

The complex demonstrative in (10) clearly does not refer to a particular day.⁸

Thirdly, complex demonstratives can take narrow scope with regard to other quantifiers in a way that is very puzzling from the point of view of the orthodox theory. Consider King's example:

- (11) That professor who brought in the biggest grant in each division will be honoured

It appears that (11) is ambiguous between: the reading (11₁), on which a specific professor brought in the biggest grant in every division; and the reading (11₂), on which, in each division there was a different professor who brought in the biggest grant. But the narrow scope reading (11₂) is one in which no particular individual is referred to. Furthermore, the scope interaction between the expressions here is clearly highly suggestive that each is a quantifier phrase. What is more, the narrow scope reading (11₂) is far more natural than (11₁).⁹

5.4 Quantificational analyses

The considerations highlighted in the previous two sections lend support to a quantificational analysis of definite descriptions. In this section, I will discuss the quantificational theory of complex demonstratives developed by King (2001), which is by far the most sophisticated theory so far presented in the literature. In considering some recent criticisms of King's theory from Braun (2008a),¹⁰ I will suggest some modifications to King's theory that will result in a semantic interpretation of complex demonstratives much closer to that standardly accepted for definite descriptions. I will further develop this interpretation in the final section of the chapter.

One might be tempted to assimilate complex demonstratives to definite descriptions from the outset. However, there are serious obstacles to this approach. A simple assimilation of the two sorts of expression will not be adequate to explain the semantics of complex demonstratives when they occur in cases where they are accompanied by an essential demonstration. Aside from the fact that these demonstrations appear to guarantee that these uses of complex demonstratives are rigid, there are obvious differences in semantic function of the two expressions in these situations. Consider, for example, a case where one wishes to pick out a particular sheep from a flock of sheep by use of the complex demonstrative 'that sheep', accompanied by a demonstration of the particular sheep one has in mind. It seems that an utterance of 'the sheep' in this situation would be ineffective and infelicitous. The situation will be more pronounced if one wishes to distinguish more than one sheep, for example, when uttering the sentence 'that sheep is older than that sheep'. This utterance, accompanied by the relevant demonstrations, is clearly not equivalent to the infelicitous 'the sheep is older than the sheep'. Whatever the relationship between 'that sheep' and 'the sheep' is, therefore, it cannot be one of simple synonymy.

Rather than taking the model of definite descriptions as the starting point for establishing the meanings of complex demonstratives, King takes the determiner 'that' as a primitive quantifier, defined contextually, as follows. In a sentential context in which a complex demonstrative occurs, the quantifier 'that' contributes to the proposition expressed a four-place relation of the following form (ibid.: 43):

- (12) ____ and ____ are uniquely ____ in an object x and x is ____

The first argument place is saturated by the property expressed by the matrix of the complex demonstrative, and the latter is saturated by

a property supplied by the remaining sentential context (thus King's complex demonstratives are 'incomplete symbols' in the sense of Russell's (1905c) account definite descriptions). For example, the first and last argument places of the relation are saturated as follows by the lexical meaning of the sentence 'that F is G':

- (13) F and ____ are uniquely ____ in an object x and x is G

The remaining argument places are saturated by non-sentential contextual elements. The first is saturated by the property of being identical with the object which is intended, or demonstrated, by the speaker, while the third place is saturated by the property of being jointly instantiated in the world and time of the context of the speaker's utterance. Thus, when a speaker utters 'That F is G' in a world w , at a time t , demonstrating or intending an object b , her utterance literally means:

- (14) F and $=b$ are uniquely jointly instantiated in w and t in an object x and x is G

(Here ' $=b$ ' denotes the property of being identical with b). In King's formal notation (which makes clear that 'that F' is a restricted quantifier):

- (15) $[\text{THAT}_{=b, jw t} x: Fx] (Gx)$.

As mentioned above, King also thinks that there are non-perceptual uses of complex demonstratives. These NDNS (no demonstration, no speaker-reference) uses of complex demonstratives are non-rigid, and divide into those cases where the speaker's intentions are redundant, and those where they are not. An example of an NDNS use where the speaker's intentions are redundant would be (9) above. As the speaker's intentions are redundant, the second argument place in King's analysis of the logical form of the complex demonstrative is not filled by an additional property intended by the speaker (such as the property of being identical with an object b), but is simply filled by the same property as the one filling the first (hence it is redundant). As the expression is not rigid, the third argument place cannot be filled by the property of being jointly instantiated at a world, as this would have the effect of rigidifying the expression. So, in these cases, the properties (in fact, of course, just one property, which is duplicated) in the first two argument places just have the property of being uniquely and jointly instantiated (without reference to a world) attributed to them. So (9) has the following meaning:

- (16) Being a hominid who first discovered how to start fires and being a hominid who first discovered how to start fires are uniquely jointly instantiated in an x and x was a genius

As Braun (2008a: 340) notes, this is modally equivalent to (17):

(17) The hominid who first discovered how to start fires was a genius

If F and F are uniquely jointly instantiated in an object x which is G , then there is a unique F which is G , and that there is a unique F which is G is precisely the proposition expressed by ‘the F is G ’ on Russell’s theory of descriptions. So, for NDNS uses where the speaker’s intentions are redundant, King’s theory predicts that ‘*That* F is G ’ has the same truth-conditional content as ‘*The* F is G ’.

In a recent defence of the orthodox theory of complex demonstratives, Braun (2008a) presents a series of objections to King’s account. Braun’s first objection concerns perceptual uses of complex demonstratives in modal existence claims. Suppose that, while pointing at Matti, Sally utters (18):

(18) It could have been the case that that man failed to exist

Now (18) seems uncontroversially true in Sally’s context. Yet, on the natural reading whereby the modal operator takes wide scope over the complex demonstrative, King’s theory predicts that the sentence is false in Sally’s context. This is because, for King, complex demonstratives are quantifiers that, in any possible world, quantify over the things that exist in that world. Thus (18) can be formalized as (19) if King’s theory is correct:

(19) $\Diamond [\text{THAT}_{=b, \text{Jwt}} x: Fx] \sim \exists y y = x$

This entails that there is a world w in which there is an object b that nothing is identical with. But clearly there is no such world. So King’s theory makes false predictions concerning the truth-values of modal existence claims of this kind.

It is tempting to follow King (2008a) in insisting that complex demonstratives always take wide scope with respect to modal operators in these contexts. Braun (2008a: 343–344) shows that such readings often seem strained, to say the least. Furthermore, this line of defence seems *ad hoc* in that it makes a special case for complex demonstratives, suggesting that their modal behaviour is unique among quantifiers. This may pose a question mark over the quantificational analysis, but it does not seem to be an insurmountable obstacle. However, Braun offers an argument derived from Kripke (1980) that bypasses concerns about scope altogether. Suppose that Sally, pointing at Matti, deliberately utters the falsehood expressed in this context by (20):

(20) That man does not exist

The proposition expressed in Sally's context is false in the world of that context. But what about worlds in which Matti does not exist? The proposition is true in those worlds. But King's theory again incorrectly predicts that it will be false in all worlds.

Rather than adopting the line of insisting that complex demonstratives take wide scope with respect to modal operators, a better reply to Braun's objections suggests itself if we consider the behaviour of other, less controversially quantificational, determiner phrases in similar contexts. In particular, a comparison with definite descriptions is illuminating. Let us suppose that Sally utters the completely general proposition (21):

- (21) It could have been the case that the world's tallest man failed to exist

Here, the standard semantics does not provide a true reading on which the modal operator takes wide scope over the quantifier expression 'the world's tallest man'. The intuitively true (and most natural) reading is the one where the quantifier takes wide scope:

- (22) [the x : x is world's tallest man] $\Diamond \sim \exists y (x = y)$

But now let us consider the following scenario. At a party, Sally and Matti, two undergraduate modal logic students, are introduced to a man. 'This', the party host tells them, 'is George – he is the world's tallest man!' Shortly afterwards, displaying the grasp of party etiquette so common among philosophers, Sally and Matti become engrossed in a conversation about the metaphysics of modality and existence. Sally, stressing the contingency of existence, says, 'anyone here could have failed to exist – it could have been the case that you failed to exist'. Elaborating on the point, she makes the same claim about George but, having forgotten his name, she simply says, 'it could have been the case that the world's tallest man failed to exist'. What we have is a referential use of the definite description (note that the proposition the sentence has been used to convey could be true, even if the literal, quantificational, proposition semantically expressed by the sentence were false – e.g. if the party host was wrong that George was the world's tallest man). The quantificational analysis fails as the example requires a narrow scope reading of the sentence (i.e. a reading where the modal operator takes wide scope over the definite description). No such reading is available if the description is analysed quantificationally, however.

What does this show? It shows that complex demonstratives cluster with definite descriptions in perceptual uses of modal existence claims.

Far from posing a threat to the quantificational analysis, this data offers support for it by showing that the modal feature of complex demonstratives that Braun has located is shared with other expressions which are widely recognized to be quantifiers. The existence of this feature does not convince (many of) us to abandon a quantificational analysis of descriptions, so it is far from obvious why it should for complex demonstratives. At most it shows that there are referential uses of complex demonstratives. Perceptual uses of complex demonstratives are the obvious candidates for being used in this way. But so long as there are other uses which are best explained attributively, the referential uses are not sufficient to refute the quantificational theory. Just as in the case of definite descriptions, we have the option of appealing to a pragmatic account for referential uses of complex demonstratives. The fact that we already do so for definite descriptions means that we have a pragmatic account ready to hand, and the move is neither *ad hoc* nor is it introducing an unnecessary complication or epicycle into our semantic theory. It is simply a case of recognizing a shared feature of two quantifier phrases.

The simple objection that Braun derives from Kripke is also answered by this line of defence, for Sally's utterance of (20) in the suggested scenario seems to be a paradigm case of a referential use of the complex demonstrative. Thus, although the semantic content of her utterance is a proposition that lacks the modal profile that we expect, this is explained by the fact that the proposition that she (pragmatically) conveys in the scenario is just the proposition that Matti does not exist, and this proposition has precisely the right modal profile that we expect.

Braun (2008a: 345) raises a similar objection regarding modal identity sentences involving perceptual uses of complex demonstratives, such as (23) uttered by Sally in a context where she points at Matti:

(23) Necessarily, that man is identical with Matti

Clearly (23) is true in this context if 'that man' has narrow scope. But on King's theory, (23) is false on this reading in this context as there are worlds in which Matti does not exist, and in which 'that' quantifies over only those things which exist in that world. Furthermore (*ibid.*: ft. nt. 15), in this context, King's theory predicts that Sally's utterance of (24) while pointing at Matti is true:

(24) Necessarily, he is identical with Matti

The divergence of truth value between (23) and (24) in this context is counter-intuitive and does not stand in King's favour. However, if we

assume that 'that man' is being used referentially in (23), we avoid this undesirable result – albeit by appeal to pragmatics, not semantics. Again this is unsurprising. If complex demonstratives are quantifiers that can have referential uses, then perceptual uses are the most obvious cases which are likely to be referential uses. It seems likely, in fact, that every perceptual use of a complex demonstrative, along with every perceptual use of a definite description, is a referential use, for a perceptual use simply is a use of the expression to pick out a precise, perceptually present, object intended by the speaker. This would appear to be a referential use in the case of a definite description by definition; it only seems natural to extend the same definition to complex demonstratives if we interpret them as quantifier phrases.

The above considerations show that the modal arguments marshalled by Braun against King's analysis of perceptual uses of complex demonstratives do not preclude the possibility of a quantificational analysis. However, it remains to be seen whether the best quantificational analysis is indeed the one given by King. To assess that, we must consider more than the perceptual cases. In particular, King's proposed treatment of NDNS cases needs examination. We have seen good reason to resist the temptation to assimilate perceptual uses of complex demonstratives to definite descriptions, but what about the NDNS uses? We saw above that King's analysis predicts that NDNS uses where the speaker's intentions are redundant do in fact display the same truth-conditional content as definite descriptions. One might be tempted by this observation to assimilate all NDNS uses of complex demonstratives to uses that are semantically equivalent to uses of definite descriptions, but King also thinks that there are NDNS uses where the speaker's intentions are not redundant, and that in such cases complex demonstratives behave differently to definite descriptions. Consider the following example of his. A group of people silently calculate that there is exactly one place on Earth's surface (though the exact location remains unknown) where the Earth's gravitational field is extraordinarily weak, allowing people to jump unusually high in that location. One of the calculators says:

(25) Even I could slam dunk in that place

In this case, King claims, the proposition the speaker expresses is that they (the speaker) could slam dunk in *that place where the Earth's gravitational field is weak*. So the property of *being a place where the Earth's gravitational field is weak* is contributed to the complex demonstrative by the speaker's intentions. King takes examples like this to show that speakers' intentions are not always redundant in the semantics of NDNS uses.

It would seem to follow from this conclusion of King's that we cannot assimilate NDNS uses to mere semantic equivalents of uses of definite descriptions. In fact, King claims that in all cases where speakers' intentions play a role (including NDNS ones), substitution of the 'that' by a 'the' in the complex demonstrative seems to result in infelicity, for example:

(26) *Even I could slam dunk in the place

King maintains that (26) is infelicitous or, at least, 'odd', remarking that '[p]resumably the oddness here results from the description being radically incomplete' (King, 2001: 69). I must confess that I do not share King's intuitions concerning (25) and (26). Agreed, if we take the two sentences out of context, (26) sounds odd by comparison to (25). But once we contextualise the utterances of these sentences in the way that King suggests, (26) seems quite admissible to me. Certainly, had the calculator uttered (27) instead of (25), there would seem to be nothing wrong with her utterance:

(27) Well, now we know it exists; we just don't know where the place is

In (27), the 'it' is an anaphor, but it is anaphoric on the definite description, not on any prior referring term. The description is clearly being used attributively. King is surely right, however, that definite descriptions do not contain an argument place for speakers' intentions. The most natural explanation of what is happening in these cases is that a pragmatic process of *narrowing* is restricting the range of the quantifier phrase 'the place' to a contextually salient domain. The same phenomenon is, after all, widely recognized for other uses of natural language quantifiers, as we saw in Chapter 1. For example, suppose I utter (28) in conversation with my colleague in the philosophy department:

(28) Everyone knows that Russell was a logicist but few people know that he was also an expressivist

The fact that my five-year old daughter does not know that Russell was a logicist is not, in this context, a falsifier of my claim. Although it falsifies the proposition literally expressed by this sentence, the sentence that I actually communicate in this instance is subject to contextual modifications of its literal meaning. The result is that I communicate something along the lines of 'every *philosopher* knows that Russell was a logicist but few *philosophers* know that he was also an expressivist'. This result is secured by the shared background assumption that there is a

restricted class of individuals over which the quantifiers range, namely the class of philosophers.

Similarly, to use a variation on an example often cited, suppose I invite my friend over to consume large quantities of beer while watching a football match on television. On noticing my friend draining her latest bottle of beer and subsequently standing up and heading towards the kitchen, I say:

(29) There's nothing in the fridge

Intuitively, my utterance is true if and only if there is no *beer* in the fridge. The presence of a margarine tub, or carton of orange juice, or the presence of molecules of oxygen, carbon dioxide, etc., in the fridge, does not serve to falsify my claim, despite the fact that margarine tubs, juice cartons, and molecules of oxygen and carbon dioxide are *things*. Again, the context has led to a narrowing of the content of 'nothing', to a restricted domain.

As quantifier restriction is widespread there is no theoretical cost in appealing to it in explaining cases like (29). But, in that case, there is also no theoretical cost in appealing to it in explaining cases like King's original (26). By contrast, King's analysis of NDNS uses with non-redundant speaker intentions does have theoretical costs. For one thing, as Braun (2008a: 347–348) notes, it has counter-intuitive modal consequences. Consider the following scenario (based on ones from King and Braun): A Member of the British Parliament belonging to the Conservative party has revealed to newspaper journalists, by making an anonymous tip-off, a number of fraudulent expenses claims made by Labour party MPs. Hearing of this, those Labour MPs who are guilty of making such claims are angered. One of them says:

(30) That Tory is going to pay for this!

Now (30) is clearly an NDNS use. Furthermore, the speaker's intentions are not redundant, for the Tory who the speaker claims is going to pay for his or her actions is that Tory (whoever they are) who revealed the fraudulent expenses claims to the press. Thus, on King's analysis, (30) has the form:

(31) [THAT_{revealing fraudulent expenses claims, /} x : Tory x] (x is going to pay for this)

That is:

(32) Being a Tory and revealing fraudulent expenses claims are jointly instantiated in an object x and x is going to pay for this

But, on this analysis, the MP who uttered (30) could continue:

- (33) It is necessarily true that that Tory, if he or she exists, is revealing fraudulent expenses claims

On King's analysis, it seems that (33) is true, as the narrow scope reading (of the complex demonstrative relative to the modal operator) is the most natural. King might perhaps protest that (33) should be given a wide scope reading, but (34) below seems definitely resistant to such a reading:

- (34) In all possible worlds in which that Tory exists, he or she is revealing fraudulent expenses claims

This is, to say the least, counterintuitive, for that Tory, whoever he or she may be, inhabits worlds where politicians are all trustworthy, and worlds in which he or she does not even enter into a career in politics.

More generally, it seems undesirable to make unspoken restrictions on quantification of this sort *semantically* relevant. If the objects of semantic evaluation are interpreted LF representations (and King's earlier arguments concerning movement phenomena appear to commit him to the view that they are),¹¹ then King would seem to be committed to the claim that the unspoken material is an aphonic constituent of the LF. This hypothesis is both implausible and unwieldy, in light of simple explanations from pragmatics of the role played by the unspoken material in these cases.¹² It seems, then, that it is quite plausible to interpret NDNS uses of complex demonstratives as semantically equivalent to definite descriptions. Furthermore, in cases where the speaker's intentions are non-redundant, it seems plausible to appeal to a pragmatic restriction of the domain of the quantifier in order to explain how speaker intentions achieve their goal, without positing an additional argument place in the definite description for them to satisfy.

On the analysis of non-redundant NDNS uses of complex demonstratives as contextually restricted incomplete definite descriptions that I am suggesting, the counterintuitive modal profile of King's account is avoided. For the complex demonstrative 'that Tory' is semantically equivalent only to '[the x : x is a Tory]'. As this contextually supplied restriction is not part of the literal meaning of the complex demonstrative, we avoid the complications to semantic theory that come from bestowing semantic powers on things that are not actually said during an utterance.

To complete this discussion of quantificational analyses of complex demonstratives, I will now consider some arguments from Lepore and

Ludwig (2000) against quantificational accounts. Their objections are directed at a particular kind of quantificational theory, but some of the objections generalize and, if valid, would apply to the analysis I will offer in the next section. The particular kind of analysis they aim their objections at is the kind that Neale (1993b) appears to envisage, whereby 'that F' is construed as semantically equivalent to 'the F which is actually now demonstrated by me'.¹³ They present three objections to such an analysis.

The first objection is that quantificational analyses provide incorrect predictions about the truth-conditions of sentences containing 'vacuous' demonstratives. An expression is vacuous if it lacks a referent. A demonstrative is vacuous if no object is demonstrated. Quantifiers, having no vacuous uses, seem unable to give demonstratives the right semantic profile, they claim:

Intuitively, someone who gestures to his right saying, 'That philosopher is a gymnosophist', when nothing is to his right, has not said something false, but has failed to say anything at all. In such a situation it is quite unclear how we could assign a truth-value to the utterance. Yet quantifiers have no vacuous uses, since every quantified sentence...has a truth value.

(Lepore and Ludwig, 2000: 209)

It is worth noting that this objection applies more generally than Lepore and Ludwig state. King's analysis, for example, will also be open to this objection. As all quantified sentences (with some irrelevant exceptions)¹⁴ have truth-values, it is impossible for any quantificational account to meet this criterion.

However, it is far from clear that this is a problem, because it is far from clear that Lepore and Ludwig really have hit upon a strong or reliable intuition here. To whom is it intuitive that the speaker in the above situation has *said nothing*? Surely only one whose intuition is fuelled by prior theoretical reflection on semantics, pragmatics, and (perhaps) presuppositional accounts of reference. It isn't the intuition of Gilbert Ryle's 'man on the Clapham Omnibus'. There is a speaker. Words have been uttered by them. Intuitively, therefore, they have *said* something. Of course, we may have a subsequent debate about whether they said something that has a *truth-value*. But this does not seem to be an argument that can be settled by appeal to pre-theoretical intuitions alone.

Furthermore, much as we have seen with the data concerning incomplete definite descriptions in earlier chapters, there is competing evidence here. Even if one shares Lepore and Ludwig's intuition that an utterance of 'that F is G' (or 'that is G') accompanied by an 'empty' demonstration fails to determine a truth-value, we find contrary results when it comes to NDNS uses. Consider again King's example (9), uttered by our hominid history lecturer. Suppose that, as is certainly possible, no one hominid discovered how to start fires. Rather it was a genuine team effort on the part of several hominid researchers. In that case the complex demonstrative 'that hominid who discovered how to start fires' ought, according to Lepore and Ludwig, to be vacuous. Perhaps one might have the intuition that (9) would lack a truth-value in this circumstance. But it seems equally intuitive that the lecturer's utterance of the sentence 'I am that hominid who discovered how to start fires' is straightforwardly false. This result cannot be secured by analysing the complex demonstrative as vacuous in Lepore and Ludwig's sense.

The second objection raised by Lepore and Ludwig does apply only to simple occurrences of demonstratives. The sentence (35) has only one reading, whereas its alleged semantic equivalent (according to the quantificational reading Lepore and Ludwig are rejecting) has the two scope readings given in (36) and (37):

(35) John believes that that is thin

(36) John believes that (the object now actually demonstrated by me) is thin

(37) The object now actually demonstrated by me is such that (John believes that it is thin)

As Lepore and Ludwig note, one could respond to this by following a suggestion of Neale's (1993b). Neale suggests that demonstratives always take wide scope. They reject such a response, however, on the grounds that it is *ad hoc*. This seems right, for much the same reason that we considered above when considering possible replies to Braun's objections to King. Notice, however, that the objection Lepore and Ludwig are raising does not obviously extend to complex demonstratives. It is plausible to suppose that (38) has the two scope readings given in (39) and (40):

(38) John believes that that man is thin.

(39) John believes that (that man is thin).

(40) That man *x* is such that (John believes that *x* is thin).

Here (40) could be true and (39) false if the man denoted by the complex demonstrative was a convincing transvestite, for example.

Lepore and Ludwig's final objection concerns the unintuitive entailments of uses of demonstratives on the version of the description theory they are opposing. As these entailments stem from the particular descriptions employed in the theory, the objection does not extend to other theories such as King's or the one that I will propose in the next section.

5.5 The semantics and pragmatics of 'that' and 'the'

The considerations of the previous section make it tempting to conclude that all NDNS uses of complex demonstratives are reducible to (i.e. synonymous with) ordinary definite descriptions. But this leaves us with the question of what the relation between NDNS uses and perceptual ones is. It might be thought that the relation could be explained by taking all perceptual uses of complex demonstratives as equivalent to referential uses of descriptions, thus permitting a total semantic assimilation of complex demonstratives to definite descriptions. This move does not seem plausible, however, in light of an important difference between the two mentioned earlier. Consider a situation in which someone is shopping for a new car. In the display area they could admissibly utter (41) but not (42):

(41) That car is cheaper than that car but more expensive than that car.

(42) *The car is cheaper than the car but more expensive than the car.

It thus seems that (42) is different to (26) which, contrary to King, I have argued does have a felicitous reading. Why is this? Presumably because the definite description(s) in (42) remain radically incomplete even after the addition of contextual cues of the sort that might in other circumstances license a referential use. The context just doesn't seem to be fine-grained enough to individuate the occurrences of the definite description as distinct referential uses here. In the case of (41), however, it is obvious that a simple series of demonstrations will individuate the distinct extensions of the complex demonstrative in each case. In other words, a simple assimilation of perceptual uses of complex demonstratives to uses of referential descriptions does not preserve the full *demonstrative* quality of (perceptual uses of) complex demonstratives. Preservation of that quality is clearly a necessary condition that must be met by any account of the meanings of complex demonstratives (whether it does so semantically or pragmatically).

On the assumption that the nominal makes a semantic contribution to the meaning of a complex demonstrative, what we need is for the demonstrative content to also be preserved. We can certainly think of this demonstrative content as a context-sensitive restriction on the range of the description. Let ' R_c ' be the predicate that contributes this restriction (whatever it may be) to the quantified nominal relative to a context c . We thus obtain a context-sensitive restricted quantifier ' $\text{The}^* F$ ', which has the following relation to ' $\text{The } F$ ' at the level of logical form:

$$(43) \text{The } F \text{ is } G =_{\text{df}} [\text{The } x: Fx](Gx)$$

$$(44) \text{The}^* F \text{ is } G \text{ (with respect to } c) =_{\text{df}} [\text{The } x: Fx \wedge R_c x](Gx)$$

' $\text{The}^* F$ ' can be assigned a generalized quantifier which, again, differs from that expressed by ' $\text{The } F$ ' simply by virtue of the restriction imposed by R_c :

$$(45) \nu(\text{The } F) =_{\text{df}} \{X \subseteq U: \text{for some } u \in U, \{x: Fx\} = \{u\} \text{ and } u \in X\} \text{ (i.e. the set of all sets containing the unique } F)$$

$$(46) \nu(\text{The}^* F)_c =_{\text{df}} \{X \subseteq U: \text{for some } u \in U, \{x: R_c x\} \cap \{x: Fx\} = \{u\} \text{ and } u \in X\} \text{ (i.e. the set of all sets containing the unique thing which is both } F \text{ and } R \text{ in } c)$$

What will the restriction introduced by R_c have to be for ' $\text{The}^* F$ ' to mean the same thing as ' $\text{That } F$ '? An obvious suggestion is that R_c is the property of being demonstrated in c . One obstacle to accepting this suggestion is that the demonstrative content of even simple demonstratives seems to be more complex than this. The content of a demonstrative, even used perceptually, is not always fixed by a demonstration: though this may be the most common way in which reference is secured, there are alternatives. Often if two speakers engaged in a dialogue have their attention focused on the same thing, a demonstration is redundant. If my friend and I are watching television and an advertisement for a certain brand of drink is broadcast, my utterance of 'that is my favourite drink' needs no demonstration to fix the referent of the demonstrative. This feature of demonstratives extends to complex demonstratives. If I am shopping for a new car and enter the car lot to discover that it contains only one car, then my utterance of 'this car is for sale' needs no accompanying demonstration to secure reference for the complex demonstrative. All the same, a restriction is needed: there are many more cars outside of the lot. The restriction required is a weaker restriction, not to that which is demonstrated, but to that which is *contextually salient*. Notice, however, that we have a noticeable difference here to

the case where a demonstrative (simple or complex) is used on multiple occasions in an utterance to pick out distinct demonstrata. In such cases, a demonstration *does* seem to be essential.

The weaker restriction to that which is contextually salient is, in fact, just the same restriction that we have seen is called for when using incomplete definite descriptions. This is evidenced by the fact that in the car lot scenario, our speaker could also have said, quite felicitously, '*the* car is for sale'. This suggests that interpreting R_c as the property of being demonstrated in c is not so wide of the mark after all. For dropping this restriction from (46) gives us (45) – a definite description. In other words, we can understand uses of complex demonstratives in paradigm perceptual cases as equivalent to uses of 'the* F ', and the cases where the demand for a demonstration is dropped as equivalent to 'the F '. Just as we could earlier appeal to a widely recognized pragmatic process to explain the imposition of contextual restrictions on quantification in the previous section, so we also have an equally well documented pragmatic process that can explain the *removal* of a condition like R_c from 'The* F '. Loosening is the pragmatic process whereby, in a context, the content of an expression e is modulated so that rather than expressing the concept E it expresses an *ad hoc* concept E^* with wider extension than E . For example, although I in fact live just outside of Manchester, I might in some contexts answer the question 'where do you live?' by saying that I live in Manchester. This would be perfectly appropriate if I were asked the question by a foreigner possessing only a rough grasp of English geography. It would not be appropriate, however, if I were asked the same question by a Manchester City Council tax official. In the first case, I am 'speaking loosely'¹⁵ – using 'Manchester' to express the *ad hoc* concept MANCHESTER* rather than the lexically encoded concept MANCHESTER. The *ad hoc* concept is produced by dropping, in the relevant context, a condition that elements must meet to fall under the extension of the original concept.

Uses of complex demonstratives that do not require any demonstration can be understood as loose uses. They are cases where the context is sufficiently rich that R_c may be dropped, as it has effectively become redundant. Where only one F is contextually salient, there is no need to demonstrate it when using the expression 'that F '. Semantically, however, the meaning is still the generalized quantifier given in (46); pragmatically, however, the meaning expressed is the generalized quantifier given in (45), restricted in turn to that which is contextually salient. That is to say, the *literal* meaning of 'that F ' in a context c is the set of all sets containing the unique things which is both F and R in c , but

the speaker may, in the contexts we are envisaging, express the by 'that F ' the set of all sets containing the (contextually salient) thing that is uniquely F . As I have already argued that NDNS cases can, in principle, be assimilated to definite descriptions, it immediately follows that they can also be assimilated to loose uses of complex demonstratives, as I am defining them, as the loosened complex demonstratives are equivalent to the corresponding definite descriptions.

As far as the semantic theory I am proposing goes, *all* complex demonstratives, including NDNS cases, have the same literal meaning. We must, admittedly, lean heavily on pragmatics to secure this result. However, the appeals to pragmatics that I am making are all already motivated by the need to account for independent linguistic phenomena.

We can now give a precise meaning to the *determiner* 'that', by assigning to it the following function from all proper subsets Y of the universe U :

- (47) $[\text{det that}]$ is a function from any set $Y \subseteq U$, and context c , to the set of sets $\{X \subseteq U: \text{for some } u \in U, \{x: R_c x\} \cap Y = \{u\} \text{ and } u \in X\}$

The determiner 'that', in other words, is a function from any context c and set Y to the set of all sets containing the unique thing that is Y and demonstrated in c . Finally, it might be thought that, in the spirit of avoiding ambiguity, we could extend this analysis to the simple demonstrative 'that' by assigning to it the generalized quantifier in 48:

- (48) $v_{(\text{NP that})_c} =_{\text{df}} \{X \subseteq U: \text{for some } u \in U, \{x: R_c x\} = \{u\} \text{ and } u \in X\}$

Simple 'that' is here assigned, relative to a context c , the set of all sets containing the unique thing demonstrated in c . Formally, this may well be a feasible proposal (just as assigning to a proper name ' a ' the generalized quantifier $\{X \subseteq U: a \in X\}$ is formally feasible).¹⁶ One advantage of this analysis is that the same phenomenon of loosening can again be appealed to in explaining cases where simple 'that' is used in contextual settings rich enough to license the use of the expression without any accompanying demonstration in the kinds of examples mentioned above. There are, however, other issues to be considered here, not least of which is the fact that simple 'that' seems to be a quite straightforward instance of an NP. On the analysis of it as a quantifier phrase, we will have to interpret it as a determiner phrase where the nominal is so general as to be effectively redundant and thus dropped (e.g. 'that *thing*'). Perhaps there is some mileage in such an approach, but further speculation on this matter will not be pursued here.

6

Extending the Theory II: Indexicality

If the theory of descriptions is to be a proper part of a theory of natural language semantics, it must be compatible with all other proper parts of the whole theory. These will include theories of linguistic phenomena such as anaphora, tense, nominalization, and many others. As Neale (1990: 10) observes, the best approach the natural language semanticist can take here is a modular one, dealing with each phenomenon in a piecemeal fashion and subsequently piecing them together. It is well beyond the scope of this book to deal with all of the phenomena that demand explanation. In this concluding chapter I want to focus on one in particular: indexicality. However, the phenomenon is, I will argue, so central that it has repercussions for other important and puzzling linguistic phenomena including the semantics of propositional attitude reports. As this book is not just concerned to defend the theory of descriptions, but also to defend Russell's philosophy of language in general, I will focus particularly on Russell's work on indexicality. Russell's work in this area has received very little attention (and even less positive appraisal). I want to show, however, that there is more value in Russell's analysis of indexicality than it has thus far been given credit for. The bulk of Russell's writings that I will draw on are to be found in his later works, particularly *An Inquiry into Meaning and Truth* and *Human Knowledge*. These two books, the last two real philosophical books that Russell wrote, are often dismissed as inferior in quality to his earlier work. A subsidiary aim of this chapter, therefore, is to continue a project that I began in my (2005) of challenging this negative appraisal of Russell's later philosophical output.

6.1 Russell on egocentric particulars

Russell's notion of an 'egocentric particular'¹ (hereafter 'EP') embraces the expressions that, especially since Kaplan's (1989a) analysis, are commonly classified as indexicals (both pure *indexicals* and *demonstratives*). In addition to these expressions, which are all noun phrases (hereafter NPs) and hence obvious candidates for devices of direct reference, Russell also includes among EPs expressions that are not NPs, but are nonetheless widely accepted by linguists to exhibit the same deictic qualities.² These additional expressions are verb phrases (hereafter VPs) that exhibit deixis through their inflection for tense:

The words with which I shall be concerned in this chapter are those of which the denotation is relative to the speaker. Such are *this, that, I, you, here, there, now, then, past, present, future*. Tense in verbs must also be included. Not only 'I am hot', but 'Jones is hot', has a significance which is only determinate when we know the time at which the statement is made. The same applies to 'Jones was hot', which signifies 'Jones's hotness precedes the present', and thus changes its significance as the present changes.

(Russell, 1940: 108)

It might be thought that the inclusion of VPs (or, to be faithful to Russell's claim, the *tense* of VPs) will make impositions on Russell's semantic theory that are not immediately visible in Kaplan's. Kaplan's theory, which we will examine in the next section, assigns entities to indexical expressions relative to the context in which they are uttered, thereby respecting their status as singular terms. No entity as such would be naturally assigned to a VP in the same fashion.³ However, the above passage suggests that Russell envisages a paraphrase strategy designed to reduce all instances of genuine deixis to instances of indexical reference in his semantics. By paraphrasing 'Jones was hot' as 'Jones's hotness precedes the present', the egocentric quality of 'was' is captured by a straightforward reference to a temporal location by use of the NP 'the present'.⁴ It should be noted, however, that this strategy is a rather unnecessary detour for Russell. There is no reason why all EPs need to be analysed as involving reference to some entity that is the constituent of a context. An alternative move here would be to take the tense of the verb as providing a cue as to the correct context

with regard to which the utterance of the sentence containing that VP is to be evaluated, without directly referring to some entity in that context.

It is interesting to note that Reichenbach, who discussed ideas on indexicality in some detail with Russell around the time that Russell was writing *An Inquiry into Meaning and Truth*,⁵ also takes the grammatical category of verb tense as an indicator of deixis in his *Elements of Symbolic Logic*. Like Russell he seems committed to an analysis of VP deixis in terms of paraphrase into a form in which all the deictic work is performed by directly referring NPs.⁶ Both give semantic priority to the word 'this' and argue that all other indexical expressions can be reduced to expressions in which it is the only indexical expression. It is probable that Russell influenced Reichenbach, rather than the other way around, on this matter. Largely driven by his epistemology, Russell had long accorded a special semantic role to the word 'this' on the grounds that he considered it to be a logically proper name.⁷ In *An Inquiry into Meaning and Truth*, this special status is taken to signify that an analysis of the semantic value of 'this' will yield a full analysis of all EPs:

All egocentric words can be defined in terms of 'this'. Thus: 'I' means 'the biography to which this belongs'; 'here' means 'the place of this'; 'now' means 'the time of this'; and so on. We may therefore confine our inquiry to 'this'.

(Russell, 1940: 108)

The claim is a little ambiguous: on one reading it amounts to the plausible claim that the literal meaning (Kaplanian character) of an indexical expression cannot be given without employing some further indexical expression in the process. Thus, for example, we might specify the literal meaning of 'I' by the description 'the agent of this utterance'. Thus understood, Russell's point is that the only indexical we need for this is the demonstrative 'this' (either on its own or as part of the complex demonstrative 'this utterance'). On a stronger reading, which seems best supported by Russell's views on logically proper names as stated widely elsewhere, Russell is saying that all indexicals can be reduced to, or eliminated and replaced by, a definite description containing the word 'this'. This, if true, would be good evidence for thinking that the only logically proper name among indexicals is 'this'. The problem with this stronger reading is that it ignores a fundamental distinction among indexicals, namely that between 'pure' indexicals and the demonstratives. The former include 'I',

'here' (in one of its senses – the word is lexically ambiguous as we shall see shortly), and 'now', and they can be distinguished from demonstratives by the fact that they do not require an accompanying demonstration to fix their reference. The attempt to reduce the meaning of 'I' to that of some complex expression containing 'this' is therefore unsatisfactory: it 'reduces' a simple meaning to a more complex one.

Evidence of Russell's failure to fully recognize this important distinction between pure and demonstrative indexicals is to be found in the following passage:

Broadly, 'here' is where my body is – my physical body if I mean 'here' in physical space, and my percept of my body if I mean 'here' in my private space. But 'here' may be much more narrowly localized, for instance if you are pointing out a thorn in your finger.

(ibid.: 106)

In this passage, Russell slides without realizing it from the pure indexical 'here' to the demonstrative 'here'. In fact, Russell's mistake here is common. It is repeated, for example, by one of the few recent commentators of his work on EPs, Keith Green (1997: 92–3), and similar mistakes are often found in the literature on indexicality. For example, Predelli (1998: 108–9) and Kaplan (1989a: 491) use the example of pointing to a map and saying 'we are here' as a case of demonstrative 'here'. But, in fact, this is a case of *deferred* demonstrative 'here': we are not (usually at any rate) in the same physical location as the point on the map, we are at the point that the map represents. The demonstrative 'here' would be displayed in this example by pointing at the map, and saying something like 'our location is represented on the map *here*', or 'there is a peanut butter stain on the map *here*'.

6.2 Contemporary work: Kaplan's indexical semantics

Kaplan's (1989a) indexical semantics clearly distinguishes, in a way that previous attempts including Russell's failed to do, the variable and constant elements of the semantic properties of indexical expressions. Furthermore, it also captures the systematic way in which these two elements combine. The constant element is the literal meaning that is grasped by speakers of the language independently of context. For example, speakers of English know that the word 'I' refers to the

agent of its utterance. This element, Kaplan calls *character*. The variable element is the referent which, obviously, depends on the context. This element, Kaplan calls *content*. Characters are then defined as functions from contexts to contents. Contents are functions from possible worlds⁸ to extensions. The mark of an indexical is that its character is a non-constant function. The same principle applies to sentences: the character of an indexical sentence is a non-constant function from contexts to contents, the content being a proposition. So in a context in which David Kaplan utters the word 'I', its content will be David Kaplan. If he utters the sentence 'I am David Kaplan' in that context, the content of the sentence in that context will be the proposition that David Kaplan is David Kaplan. The two elements of the meanings of indexicals are thus neatly distinguished and their interaction is clear. The referent of an indexical expression is a function of character and context, thus there is a clear sense in which the content of an indexical is determined by its character (e.g. the character of 'I' determines that its content in any context must be the agent of that context). Only a speaker who grasps the character of 'I' can possibly determine its content in a given context.

This notion of context must also be sharpened if it is to perform any duty in a semantic theory. The elements of a contextual situation in which an indexical utterance is made that actually contribute to the meaning of the utterance are fairly minimal, and these elements can be abstracted away and placed in sequence to form a set-theoretic model of these salient features of context. Thus we might model the context of an utterance u by a sequence (or *index*) i of *parameters* such as $\langle a, w, l, t \rangle$ where a is the agent, w the possible world, l the spatial location, and t the temporal location of u . We can then understand utterances of indexical sentences by pairing those sentences with indexes that contain the relevant contextual parameters required to saturate the indexical expressions, thereby yielding a proposition. For example, if s is the sentence 'I am here now', then $\langle s, i \rangle$ represents the utterance of s in i , an utterance which expresses the proposition that a is at l at t in w , i.e. the output of the character function for this contextual input. We can also introduce additional parameters such as a *demonstratum* parameter, to obtain indexes to pair with sentences like 'I am looking at that, here, now'. Pairing indexical sentences with indexes yields items suitable for semantic evaluation in particular possible worlds. Just as a non-indexical sentence is true or false with respect to a possible world, so a sentence-index pair is also true or false with respect to a possible world. Note that if $i = \langle a_i, w_i, l_i, t_i \rangle$, then

the sentence-index pair $\langle s, i \rangle$ can be evaluated with respect to worlds other than w_i . It is therefore also necessary to distinguish *contexts of utterance* (represented by indexes) from *circumstances of evaluation* (possible worlds).

In many respects, it has to be admitted, Russell's theory of EPs fares very badly when compared to Kaplan's theory. Most mentions of Russell on EPs in Kaplan's work relate to obvious flaws in Russell's theory. Russell's rather obscure (Kaplan calls it 'atrocious', 1989a: 557) argument for the eliminability of indexicals from a 'description of the world, whether physical or psychological' (Russell, 1940: 115) is dismissed quickly by Kaplan, and he mercilessly exposes the lack of care Russell took over the argument is. Russell wrote: 'A physicist will not say "I saw a table", but like Neurath or Julius Caesar, "Otto saw a table"' (ibid.: 108), to which Kaplan quips: 'Why Julius Caesar would be provoked to say "Otto saw a table", is unexplained' (Kaplan, 1989a: 557).

Kaplan only sketched the problems with Russell's claim (choosing, mercifully, to ignore the problems with the arguments Russell invokes in support of the claim). The most serious problem is captured by Kaplan's remark that 'the indexicals retain a kind of epistemic priority' (ibid.: 558). The importance of this point is that the character of an indexical carries the burden of cognitive significance according to Kaplan. This view is shared by Perry, whom Kaplan cites in support, changing Perry's terminology to fit with his own (as we have just introduced Kaplan's terminology, it will be clearest to give the quote as altered by Kaplan):

Why should we care under what character someone apprehends a thought, so long as he does? I can only sketch the barest suggestion of an answer here. *We use the manner of presentation, the character, to individuate psychological states, in explaining and predicting action.* It is the manner of presentation, the character, and not the thought apprehended, that is tied to human action. When you and I have beliefs under the common character of 'A bear is about to attack me', we behave similarly. We both roll up in a ball and try to be as still as possible. Different thoughts apprehended, same character, same behaviour. When you and I both apprehend that I am about to be attacked by a bear, we behave differently. I roll up in a ball, you run to get help. Same thought apprehended, different characters, different behaviours.

(Perry, 1977: 494; cited in Kaplan, 1989a: 532)

Furthermore, there appear to be cases where the character is cognitively significant even where we are ignorant of the referent. After all, in the above cases, we could get the same actions by using proper names, so Russell's point would stand, but there are cases where we cannot employ proper names, because we are not epistemically positioned to do so. In other words, we may sometimes only have a kind of indexical knowledge of features of our environment as in the following example provided by Kaplan: 'A kidnapped heiress, locked in the trunk of a car, knowing neither the time nor where she is, may think 'It is quiet here now' and the indexicals will remain directly referential' (Kaplan, 1989a: 536).

Let us assume that the heiress's thought in fact occurs when she is positioned at the point in space marked on British maps by the UK National Grid reference SD 624 277 and that the temporal location of her thought is exactly 7.30 pm GMT on the 14th of March 2008. Replacing 'here' and 'now' in the sentence 'It is quiet here now' with 'UK National Grid Reference SD 624 277', and '7.30 pm GMT, 14 March 2008' respectively will not produce a sentence that carries the same significance for the heiress in the context in question as the original sentence did in that context, for obvious reasons. Thus, it appears that there are psychological facts which cannot be captured without indexicals.

A likely obstacle to Russell's understanding of this is his dogmatic allegiance to the principle of acquaintance. The example shows, in fact, that the principle is false, as Kaplan goes on to note:

[I]gnorance of the referent does not defeat the directly referential character of indexicals... From this it follows that a special form of knowledge of an object is neither required nor presupposed in order that a person may entertain as object of thought a singular proposition involving that object.

(ibid.: 536)

The importance of character in cognitive significance can be shown by reworking one of Russell's examples (see Russell, 1948: 101). In the following conversation, suppose that S1 and S2 have been separated on a dark night in very poor visibility:

S1: Where are you?

S2: I am here.

S1: I know you are *there*, but where is *that*?!

In this discourse, S2 is interpreted by S1 as saying something like 'I am at the location of this utterance'. In other words, S1 is responding to the character of S2's utterance, and making plain her ignorance of the content of that utterance. The cognitive significance of S2's utterance for S1, when S1 is ignorant of its content, can only be attached to its character.

Russell was certainly sensitive to the distinction between character and content, as the following passage makes clear:

The word 'now' denotes a different point of time on each successive occasion when I use it; the word 'here' denotes a different region of space after each time when I move; the word 'I' denotes a different person according to who it is that utters it. Nevertheless there is obviously *some* sense in which these words have a constant meaning, which is the reason for the use of the words.

(ibid.)

Russell is aware of the distinction between content (which he labels 'denotation' in the above passage) and character (the 'constant meaning'), but he does not fully disambiguate the two. Jager (1972) points out that these two aspects of indexical semantics are conflated in a way that leads Russell to adopt positions in *Inquiry into Meaning and Truth* and in *Human Knowledge* that contradict each other. In both cases, Russell argues that 'this' cannot be a proper name, but his arguments are importantly different in each. In the earlier work, he argues that 'this' cannot be a proper name because the semantic value of a proper name is exhausted by its referent, and this does not allow for the 'constant meaning' across contexts of 'this' (Russell, 1940: 109). In *Human Knowledge*, however, Russell argues that 'this' differs from a proper name in that 'its meaning is constantly changing' (Russell, 1948: 100). Russell's attention, it seems, is shifting unstably between the character and content of the expression, so that, as Jager puts it: 'he becomes confused as to whether the feature of 'this' that wants explaining is the constancy or the variability of its meaning' (Jager, 1972: 397). Green (2007: 48–51) endorses Jager's criticism, and draws attention to passages much earlier in Russell's writing where a similar tension can be seen. In some of these passages, in fact, Russell seems much clearer about the distinction in question. For example, the following passage from 'On the Nature of Acquaintance' carefully distinguishes the character of 'this' from its reference in a context, the former here being correctly described as

a rule governing correct utterances of the word, rather than part of its content:⁹

The word 'this' is always a proper name in the sense that it applies directly to just one object, and does not in any way *describe* the object to which it applies. But on different occasions it applies to different objects... we may say that 'this' is the name of the object attended to at the moment by the person using the word.

(Russell, 1914a: 168)

That Russell's position here has a degree of sophistication far greater than it has been credited with can be seen if we compare it once more to Reichenbach's. Reichenbach does identify the content of an indexical with the sense of a definite description which in fact provides its character, claiming that 'The word "I", for instance, means the same as "the person who utters this token"' (Reichenbach, 1947: 284). Kaplan (1989a: 519–520) exposes Reichenbach's failure to distinguish character and content by pointing out that the proposed synonymy would make any utterance of (1) true:

(1) If no one were to utter this token, I would not exist.

Kaplan's subsequent remark, 'beliefs such as [(1)] could make one a compulsive talker' (ibid.: 520) nicely illuminates the mistake Reichenbach has made. While it is true that any utterance of (2) is true:

(2) I am the person who utters this token

it does not follow that the meanings of 'I' and 'the person who utters this token' are the same. Russell, however, is clearly aware that indexicals are not synonymous with the descriptions that capture their characters, and he makes the point explicitly in the following passage:

For the purposes of our present problem, we may say that 'this' is the name of the object attended to at the moment by the person using the word... But it would be an error to suppose that 'this' *means* 'the object to which I am now attending'. 'this' is a proper name applied to the object to which I am now attending.

(Russell, 1913: 39–40)

Russell was certainly not blind to the distinction between character and content, as these passages show. It is important to note, however,

that the equally crucial distinction between *context of utterance* and *circumstance of evaluation*, is entirely absent from Russell's theory. This is a serious flaw, as it means that much of the semantic behaviour of indexicals cannot be explained on Russell's theory. For example, in the following sentence, the indexical expression 'I' must be interpreted with respect to the context of utterance c_1 , not the circumstance of evaluation e_1 , to which we look in order to determine the truth-value of the sentence uttered in c_1 :

(3) John said that I was hungry.

The referent of 'I' is the agent, a_1 , of c_1 (the context in which (3) is uttered), but e_1 is the circumstance in which John said that a_1 was hungry (an occurrence preceding the utterance of (3) in c_1 , as signalled by the tense of the verb 'was'). This phenomenon persists over repeated embeddings within propositional attitude contexts.¹⁰ For example, if one assumes that (4) is uttered by a_2 in c_2 , then a_2 remains the referent of 'I', while e_2 is the circumstance in which (4) (uttered in c_2) should be evaluated, i.e. the circumstance in which Fred allegedly said what is here attributed to him:

(4) Fred said that Mary wished that Jane desired that John believed that I was hungry

Without some form of double-indexing, it is hard to see how Russell can explain the semantic profiles of (3) or (4), or indeed of the countless potential variants exhibiting a similar structure.

6.3 Problems for the contemporary view

As we have seen, the cognitive significance of utterances of indexical sentences is attached to the character of those sentences on the Kaplan/Perry model. However, a number of objections have been raised against this claim. The following two examples are widely taken to show that there cannot be a simple identification between the cognitive significance and character of an indexical sentence.

The first example comes from Wettstein (1986). I'll call it the *Curious Rock Star Objection*. Suppose a rock star is performing on stage, wearing a costume that looks very different when viewed from the right hand side of the rock star to how it looks when viewed from his left side. I may point out the rock star to an observer on one side of the stage, then lead the person around to the other side and point our rock star out again. Suppose that, speaking very slowly during this process, I say

'he...is...him' (or, if one objects that 'he' and 'him' are different words and thus may have different characters, 'he...and...he are the same'). Here I have given the observer genuine information, but this informational content, the cognitive significance of my utterance, cannot reside in its character, for 'he' has the same character each time it occurs in the utterance.

The second example comes from Salmon (1986a). It is a modification of Putnam's (1975) 'Twin-Earth' thought experiment. I'll call it the *Twin Hubert Objection*. Suppose that on a far distant planet there is a duplicate of a particular earthly woman. The two are qualitatively identical even down to their brain states. Each has a husband called 'Hubert' and the two Huberts are also qualitatively identical with one another with one very small exception: the Hubert on earth weighs exactly 165 pounds, while the extra terrestrial Hubert weighs exactly 165.000000001 pounds. Now suppose the two women simultaneously utter the string of expressions 'He weighs 165 pounds', each referring to their husband. Assuming that one's mental state determines what concepts one is grasping or entertaining, and that the informational content of an expression determines what individual it is about, it follows that the cognitive significance of 'he' cannot be its character, for each woman has expressed a sentence with the same character, yet one has said something true, the other something false.

Each of these examples appears to show that characters are not sufficiently fine-grained to capture informational content, and therefore are not suitable vehicles of cognitive significance. How convincing one finds each alleged counterexample to Kaplan's claim that cognitive significance attaches to character will depend, to some extent, on one's attitude towards the relationship between the idealized structures of formal semantics and the actual relationships between expressions and their meanings that those structures are intended to model. It is simple enough, for example, to respond to the Curious Rock Star Objection by drawing more fine-grained distinctions in the indexes that model contexts of utterance. This would indeed be the case according to the semantic theory of Kaplan (1989a), on which demonstratives have an essential incompleteness that requires completion by a demonstration. This demonstration acts as a mode of presentation of the *demonstratum* and provides the character of the completed demonstrative expression (see *ibid*: § XV). A key assumption that Kaplan makes is that, in certain counterfactual circumstances, a given demonstration would

have demonstrated a different individual to the one it actually demonstrates. This individuation of the characters of demonstratives by their accompanying demonstrations is sufficient to capture a difference in cognitive significance between the two occurrences of 'he' in the Curious Rock Star Objection, as it provides a general solution to any demonstrative version of Frege's puzzle, as Kaplan explicitly notes (*ibid.*: 525). The demonstrations of the Twin Huberts can be similarly distinguished on this model. However, some have found the individuation of the characters of demonstratives by accompanying demonstrations unsatisfactory. Wettstein (1986: 196, *ft. nt.* 17) describes approaches that seek to deny that all deictic occurrences of the demonstrative 'that' have the same linguistic meaning 'heroic' attempts to deny 'plain horse sense'. Whether one shares Wettstein's intuition or not, the attempt to individuate the characters of demonstratives in terms of demonstrations seems to be thwarted by a brute fact of demonstrative reference mentioned in the last chapter, namely that we often do not employ an accompanying demonstration to fix the reference of a demonstrative. Demonstrations are not always needed to raise the referent to salience. When two mountaineers reach the top of a Himalayan ridge, just as the cloud clears to reveal to the summit of Everest towering above them, one of them may utter 'that is incredible!', and no demonstration will be required to fix the referent of the demonstrative.¹¹

As Wettstein notes, Kaplan rejected the 'heroic' approach that he had defended in *Demonstratives*, and by the time of 'Afterthoughts', had taken the reference of a demonstratives to be fixed by a 'directing intention' (see Kaplan, 1989b: 585 ff.), rather than a demonstration.¹² This view carries problems of its own, however. Although it is (or at least can be made to be) fine-grained enough to distinguish two syntactic occurrences of the same demonstrative (in the same sentence), it is not clear how, if at all, this quality can be allocated to the characters of expressions. Thus it appears that the explanation of the cognitive significance of sentences containing demonstratives no longer attaches to their character. As a result, the claim that directing intentions provide the explanation of the informativeness of identity statements containing two syntactic occurrences of the same demonstrative loses the transparency that made character-giving demonstrations attractive. In the case of demonstrations, they could be understood as supplying characters because they were literally modes of presentation of the objects that the demonstratives referred to. The demonstrations behave

similarly to descriptions. Typically, they are akin to non-rigid descriptions, and thus have the property mentioned above, of picking out different *demonstrata* in counterfactual circumstances. This provides a simple explanation of the informativeness of ‘that₁ = that₂’, because the demonstration that completes ‘that₁’ differs from that which completes ‘that₂’. The demonstration that completes ‘that₁’ and supplies its character functions like a definite description, e.g. ‘the *F*’ while the demonstration that completes ‘that₂’ and supplies its character functions like a distinct description, e.g. ‘the *G*’. The informativeness of ‘that₁ = that₂’ is therefore no more puzzling than that of a straightforward identity statement involving descriptions like ‘the *F* = the *G*’, which can be actually true, while false in some worlds. Directing intentions, however, are not so easily separated from their objects as non-rigid descriptions. It is hard to make sense of the idea of a particular *intention* to refer to *a* when uttering ‘that’ as being something that could be an intention to refer to anything other than *a* in any counterfactual circumstance. Directing intentions exhibit a degree of object-dependency that descriptions, unless rigidified, are free from. So it would appear that whatever contribution to cognitive significance is provided by directing intentions is not semantically detectable in the way that it was when accompanying demonstrations did the work.

Furthermore, it is debateable whether, in light of this difference between intentions and linguistic meanings, the resulting analysis of demonstrative reference really captures a semantic phenomenon at all. Recanati (2004b), for example, thinks that the notion of context that is being modelled in the indexes of Kaplan’s formal semantics has to be stretched so far beyond what is needed for the pure indexicals in order to accommodate demonstratives that the interaction between the expression and the context is no longer wholly determined by a linguistic meaning (character); hence the content of the demonstrative is not being fixed by semantics at all, but by a pragmatic process in disguise:

Ultimately, a demonstrative refers to **what the speaker who uses it refers to by using it**. To be sure, one can make that into a semantic rule. One can say that the character of a demonstrative is the rule that it refers to what the speaker intends to refer to. As a result, one will incorporate a sequence of ‘speaker’s intended referents’ into the narrow context, in such a way that the *n*th demonstrative in the sentence will refer to the *n*th member of the sequence. Formally that is fine, but philosophically it is clear that one is cheating. We pretend

that we can manage with a limited, **narrow** notion of context of the sort needed for handling pure indexicals, while in fact we can only determine the speaker's intended referent...by resorting to pragmatic interpretation and relying on **wide** context.

(Recanati, 2004b: 453, original emphasis)

Kaplan's indexical semantics is commonly held to mark a quantum leap in the project of formal semantics by bringing a range of contextual determinants of truth-conditional content under the predictive control of linguistic rules: the role of context in fixing the content of an indexical is exhaustively governed by character. If Recanati is right, then the appeal to directing intentions means that the quantum leap forwards is followed by a substantial step backwards.

A final problem to note for the appeal to directing intentions is that it is far from clear that they can provide a solution to Salmon's Twin Huberts Objection. A key assumption of the thought experiment is that the women in the supposed scenario have qualitatively identical brain-states. It ought to follow that they have qualitatively identical directing intentions.

6.4 A Russellian response: the inner and the outer spaces of egocentric semantics

In his discussion of Russell on EPs (still one of the most substantial discussions of the subject published), Jager (1972) interprets Russell as holding that the primary function of an EP is not to refer (at least in the sense that names refer). Rather: 'Their use is to specify perspectives' (Jager, 1972: 397). This is not, it should be made clear, akin to the highly eccentric claim often attributed to the later Wittgenstein that the first-person pronoun does not refer.¹³ The success had in the semantic analysis of indexicals in the last half century has made that view untenable. Russell's claim is more sophisticated and sensible: it is a claim that indexicals do *more* than just refer. Indexicals do not merely refer, they also have the function of somehow raising to semantic salience the perspective of the agent who utters them. For a large class of cases, the perspective of the agent may be raised to salience simply *by* using an indexical or demonstrative to refer. If an agent utters 'today' in a context *c*, the character of 'today' ensures that the temporal parameter is set at the particular temporal location (in *c*) of the agent of *c*. So, in cases such

as this, those aspects of the agent's perspective that are semantically relevant are raised to salience simply by using the right indexical to refer in the context of utterance. The majority of cases perhaps conform to this model. But Russell's claim also allows for an agent's perspective to be made semantically relevant in other ways than by directly referring. Indeed, as we saw in section 1 above, Russell's decision to include tense-inflected verbs among EPs entails the possibility of expressions other than those in the traditionally accepted class of indexical and demonstrative expressions (or even the general class of referring expressions) performing the function of raising an agent's perspective to semantic salience. We saw in section 1 that Russell himself may have intended to artificially restrict the resulting class of EPs to a class of referring expressions by employing a paraphrase strategy; the goal of the strategy is to convert deictic sentences whose context sensitivity stems from deictic VPs into sentences whose only context-sensitive expressions are NPs. But we also noted the only available course of action if one wants to recognize the deictic quality of tense: VPs (inflected for tense) may be admitted as irreducibly deictic expressions and thus be admitted directly into the class of EPs. Semantically, this can be captured by taking the presence of a VP in a sentence to routinely require that utterances of the sentence be paired with indexes that provide the temporal location of those utterances in the way that is familiar from treatments of sentences containing referring temporal indexicals. *Utterances* of the sentence express propositions; the sentences do not express propositions outside of such contexts. Thus we are justified in treating VP tenses as irreducibly egocentric in the sense that they reflect the perspective of the agent who utters them, despite the fact that, on this model, they need not *refer* to times by contributing unarticulated constituents which denote them. As it happens, we have seen that there is strong linguistic evidence that tenses in fact should be understood as referring to times. But the possibility of the alternative model is sufficient to show that deixis can be handled without positing referring expressions to provide it. While temporality may be best handled by positing referring constituents in the LFs of tensed sentences, other kinds of deixes may be better treated differently. Can Russell's notion of an egocentric perspective be treated in such a way? To answer this question, we first need to ask: what, precisely, does Russell have in mind when he talks of perspectives? Take this passage from Russell:

It is to be observed that 'here' and 'now' depend upon perception; in a purely material universe there would be no 'here' and 'now'.

Perception is not impartial, but proceeds from a centre; our perceptual world is (so to speak) a perspective view of the common world.
(Russell, 1948: 107)

Jager's suggestion, and I think it is well supported by the texts in question, is that for Russell, the central function of an EP is to make this 'perceptual world' of the agent relevant to the meaning of sentences containing that EP.

Jager, although he criticizes Russell for his confusion over 'whether the feature of 'this' that wants explanation is the constancy or the variability of its meaning' (Jager, 1972: 397), is also guilty of failing to distinguish the character and content of indexicals; in fact, he confuses things further by running together semantics and pragmatics in his discussion of the 'use' of an EP (*ibid.*). We need not exhibit the same failure, however. Drawing on the resources of Kaplan's semantic theory, let's put Russell's claim as best as we can. There seem to be two alternatives. Firstly, we might pursue a line similar to that taken recently by Recanati (2007) and attribute a variability to the means by which an utterance is evaluated in order to try and capture speakers' perspectives. Secondly, we might give an approximation of Russell's position by interpreting him as urging a finer-grained notion of character than we find in Kaplan.

The first alternative introduces a notion of what Recanati terms 'circumstance-relativity'.¹⁴ On this view, egocentricity introduces a degree of relativity to the speaker, but this does not manifest itself in the *content* of an utterance. However, contents are functions from circumstances of evaluation to extensions. Making the choice of the correct circumstance relative to speakers opens up the possibility of speakers arriving at different extensions by applying the same contents to different circumstances. This has the advantage of fitting very well with the passage from *Human Knowledge* quoted above, where Russell speaks of the 'perceptual world' of the speaker. We can perhaps capture Russell's thought, albeit in theoretical terms unavailable to him, by taking him to be insisting that utterances are always evaluated relative to a perceptually, or egocentrically, individuated world (circumstance). Such a model can, in a sense, account for differences in meaning without differences in content. The level of meaning at which they differ is that which we arrive at once the content is evaluated. Barwise and Etchemendy (1987)¹⁵ call this kind of meaning an 'Austinian proposition': roughly, the proposition that the situation the content is about supports the content. An example makes the point clear. Let us suppose that Holmes and Watson are dining together and are seated at

opposite sides of the table, with the salt and pepper pots in the middle of the table between them. From Holmes's perspective, the salt is to the left of the pepper. He says 'the salt is left of the pepper'. Watson, incorrectly, thinks that the salt and pepper pots are arranged oppositely to how they actually are. He thus also says, 'the salt is left of the pepper'. There is a clear sense in which Watson and Holmes have said the same thing; yet Holmes has said something true, while Watson has said something false. So there must be another sense in which they have said something different. How do we explain this? They have each said something with the same content, but expressed different Austinian propositions, because the circumstance of evaluation for each differs. Their own distinct egocentric perspectives contribute to determining the Austinian propositions, resulting in a divergence of truth-conditions, despite sameness of content.

How does circumstance-relativity help with the problems under consideration here? Consider first the Twin Huberts objection. The spouse of Hubert occupies a distinct egocentric perspective to Twin-Hubert's spouse, even though both spouses are in the same brain state, and are uttering the same content. They do not, therefore, utter the same Austinian proposition. Turning to the Curios Rock Star objection, however, things are not quite so simple. There is an obvious sense in which I am occupying different perceptual spaces when I make my two utterances of 'he'. But it is not obvious how this can be captured by relativizing the circumstance. Only one proposition (content) has been uttered here, and whatever *single* circumstance we evaluate the content relative to, it will fail to distinguish the two perceptual spaces. The only way that it seems we can allow both perceptual spaces to be acknowledged is by denying that a *single* utterance is being made in this case. This seems *ad hoc* and intuitively incorrect.

Let us now look at the second option, that of refining the notion of character to fully capture egocentric perspectives. On this model we might say that the correct character of 'I', its literal meaning, is such that one who grasps that meaning knows that to be in a position to utter it is to occupy a certain perceptual perspective – to know what it would mean to grasp it 'from the inside' as an agent of an utterance. In short, it serves to introduce the egocentric perspective of the agent. Care must be taken over this, however, lest one run the risk of artificially distorting the character of an expression to embrace egocentricity. Egocentricity is not itself a feature of character. Character is a function from contexts to contents; in other words, it is a rule specifying in advance how the referent of an indexical expression is determined when it occurs in a context.

For example, the character of 'I' is a rule that, for any context *c*, assigns the agent of *c* as the referent of 'I' when uttered in *c*. The egocentric perspective of the agent should not alter this rule. Rather, what we want is to enable the egocentric quality of an indexical expression to be somehow *acknowledged* in its character without altering the function itself.

One way to give a concrete sense to this metaphor of *acknowledgement* of egocentricity by character is to refine the notion of character by introducing a variable element into the character of an EP that represents the perspective of the speaker. Suppose, for example, that we represent the Kaplanian character of the demonstrative expression 'he' by the description 'the male demonstrated by the agent of this utterance' (or, if we prefer demonstratives to be completed by directing intentions rather than demonstrations, 'the male intended by the agent of this utterance'). The refined character that acknowledges egocentricity will be captured by the description 'the male demonstrated by the agent of this utterance from their perspective *x*', where *x* is a variable ranging over agent perspectives. As it is a perspective the agent has with regard to the referent of their utterance of 'he', we can just attach the variable to the description that picks out this referent: 'the male[*x*] demonstrated by the agent of this utterance'. Thus, the description 'the male' in this example binds the variable that ranges over egocentric perspectives on the elements of the extension of the nominal 'male', and the expression 'the male[*x*]' may be read as 'the male from perspective *x*'. The variable element occurring in the character of the EP is entirely redundant in fixing the content of the EP: the content will satisfy the description regardless of what value the variable takes. But it is not redundant when it comes to the cognitive significance that speakers and hearers attach to utterances of the EP. In grasping the character of an EP, on this model, hearers will only be able to determine the content of an utterance of that EP relative to a given perspective.

This restriction on hearers' ability to determine the content of an utterance of an EP will often be invisible. In most instances, the speaker's perspective on the object of an indexical reference does not differ substantially from that of her audience. In a typical case of reference by use of either a pure indexical or demonstrative, it will be obvious to the hearer which item is being referred to by the speaker. However, the speaker and hearer do occupy distinct perceptual perspectives and this distinction may at times become cognitively significant. This is just what happens in some of the cases that we have seen are problematic for the traditional Kaplanian account, as this cognitive significance fails to receive an adequate representation in that part of his semantic theory

which is being charged with the responsibility of carrying cognitive significance. On our revised account, however, the cognitive impact of differences between the perspectives of speaker and hearer will have a semantic representation. Consider first a simple case of a true utterance of an identity statement with two occurrences of the demonstrative pronoun employed:

- (5) that = that [uttered by *a* in *c*]

Kaplan's idea that these two occurrences of 'that' be individuated by a directing intention fails, because it would appear that the directing intention accompanying either occurrence of 'that' is the same; thus the two occurrences have the same character and the potentially informative quality of the utterance cannot reside in the character of the sentence uttered. On the revised semantic theory we are extracting from Russell, however, the two EPs differ in their character by virtue of their variable component. Thus the egocentric character of (5) may be represented as:

- (6) The demonstratum[*x*] demonstrated (or intended) by the agent of this utterance = the demonstratum[*y*] demonstrated (or intended) by the agent of this utterance

An utterance of (5) can be informative to a hearer if it has the character described in (6), because a speaker may be ignorant of the fact that the demonstratum[*x*] = the demonstratum[*y*] – their ignorance being a matter of their lack of knowledge that demonstrated object from perspective *x* is the same demonstrated object from perspective *y*; i.e. their ignorance about perceptual perspectives occupied by the agent of an utterance of (5).

It is obvious how this can be extended to provide an answer to Wettstein's Curious Rock Star Objection. When the agent of the utterance envisaged by Wettstein says:

- (7) He and he are the same

the two occurrences of 'he' will again differ potentially in their cognitive significance by virtue of containing at the level of their character distinct variable elements. Thus the character of (7) may be represented by:

- (8) The male[x] demonstrated (or intended) by the agent of this utterance = The male[y] demonstrated (or intended) by the agent of this utterance

Again, an utterance of (7) can be informative to a hearer if it has the character described in (8), because a speaker may be ignorant of the fact that the male[x] = the male[y] – their ignorance being a matter of their lack of knowledge that the male from perspective *x* is the same male from perspective *y*; i.e. their ignorance about perceptual perspectives occupied by the agent of an utterance of (7).

Finally, we can appeal to the same mechanism to answer Salmon's Twin Huberts Objection. The earthly wife of Hubert and her twin-earthly twin are uttering sentences whose literal meanings contain variable elements that take different values in each of their particular contexts of utterance, because the sentence they utter, namely

- (9) He weighs 165 pounds

has a character that can be represented thus:

- (10) The male[x] demonstrated (or intended) by the agent of this utterance weighs 165 pounds.

Earthly Hubert's wife's utterance differs in informational content from Twin-earthly Hubert's wife's utterance because the variable ranging over perspectives in (10) takes a different value in each utterance.

6.5 The egocentric character of singular thought

In Chapter 1 I mentioned, and promised to return to, an objection raised against Russell's appeal to scope distinctions in explaining a puzzle concerning cognitive significance. Saul Kripke and Scott Soames have both recently shown that one of Russell's most famous instances of a scope ambiguity – one that Russell thinks can be removed by the theory of descriptions, thereby removing a potential problem of explaining the cognitive significance of identity statements – is not as easily solved as Russell thought. The ambiguous sentence in question is: 'George IV wished to know whether Scott was the author of *Waverley*'. If 'the author of *Waverley*' is understood as a referring expression, and referring expressions are assumed to be substitutable without loss of meaning in any context, then there is no difference between George IV's wish, and

his wish to know whether Scott is Scott. But, as Russell famously puts it, George is not interested in the law of identity. Russell, we know, tries to solve the problem by claiming that: (a) definite descriptions are not referring expressions but quantifiers; and (b) that those quantifiers are of sufficient syntactic complexity to interact with other logical operators in more than one way, thus resulting in differences of scope. Here is Russell's account of the way this helps:

When we say 'George IV wished to know whether Scott was the author of *Waverley*', we normally mean 'George IV wished to know whether one and only one man wrote *Waverley* and Scott was that man'; but we *may* also mean: 'One and only one man wrote *Waverley*, and George IV wished to know whether Scott was that man'... The latter might be expressed by 'George IV wished to know, concerning the man who in fact wrote *Waverley*, whether he was Scott'. This would be true, for example, if George IV had seen Scott at a distance, and had asked 'Is that Scott?'

(Russell, 1905c: 52)

But, as Kripke points out, the wide scope reading remains problematic:

Russell's characterization is a good common sense interpretation of the large scope analysis. However, this is an existential quantifier and the variable takes a unique value. What can that value be? Scott himself! But then the first gentleman of Europe *is* interested in the law of identity... This despite the fact that his interpretation of the large scope analysis is a very commonsensical one. (That is, intuitively, it might seem to be quite reasonable).

(Kripke, 2005: 1024).

As explained in Chapter 1, what Kripke illustrates by this example is that the theory of descriptions, by itself, is not able to provide a solution to all cases of Frege's puzzle, even where they are expressed by the use of definite descriptions rather than singular terms. This is because, on the wide scope, *de re*, reading, of a propositional attitude ascription such as:

(11) *S* believes that the *F* is the *G*

S is actually entering into the relevant propositional attitude towards a *singular* proposition. The (fully)¹⁶ wide scope reading of (11) will be:

(12) [The *x*: *Fx*][The *x*: *Gx*](*S* believes that *x* = *y*)

If we suppose that some object *o* is uniquely *F* and *G* (and thus becomes the value of the existentially quantified variables '*x*' and '*y*'), then (12) attributes to *S* a belief in the singular proposition that *o* is *o*. So on the wide scope reading of propositional attitude sentences of this sort, Russell is no better placed to explain their cognitive significance than that of propositional attitude sentences which employ logically proper names to directly refer to the objects of *de re* attitudes about identities.

In fact, the singular proposition that George IV is related to in the example from 'On Denoting', is one whose cognitive significance to him can be readily explained, as it is explicitly described by Russell as being grasped via an occurrence of an *indexical* sentence ('is *that* Scott?'). Even without the modifications we have urged in the preceding section, the Kaplan/Perry account of the cognitive significance of utterances of indexical sentences can easily explain what is going on in this example. George IV's enquiry relates to the character of the sentence 'that is Scott', whose non-trivial character can be represented as:

- (13) The demonstratum of this utterance is Scott

However, one could, of course, easily alter the example so as to avoid the use of indexical expressions altogether. Take for example, the wide scope reading of:

- (14) Lois wishes to know if the Caped Crusader was the bespectacled reporter

This will have the following logical form:

- (15) [The *x*: *x* is a caped crusader][The *y*: *y* is a bespectacled a reporter]
(Lois wishes to know if $x = y$)

This may be true if, catching a glimpse of Clark without the spectacles that have so far brilliantly concealed his likeness to his alter ego, Lois suddenly suspects that he is Superman. Assuming for the sake of the argument that 'Clark Kent' and 'Superman' are genuine proper names, this will have Lois related to the singular proposition that Clark Kent/Superman is Clark Kent/Superman. As her access to this proposition is not reached by any indexical sentence but (presumably) by a sentence that just contains the proper names in question (whose character is constant), the character of the sentence cannot save her from an interest in the law of identity. So the ability of the Kaplan/Perry account of the cognitive significance of indexical sentences to account for the actual example used in 'On Denoting' is just a fortunate accident that cannot

help once we see that the problem generalizes beyond the example to non-indexical cases.

Although the Kaplan/Perry account will not help Russell, his own account of EPs can. There is no reason why the egocentric character of indexicals that we have developed an account of in the last section should not be extended to a more general class of referring expressions. In other words, the solution to Frege's puzzle and its variants that has been developed to deal with localized versions within indexical semantics in the previous section can be generalized to provide a solution to the puzzle construed as a general problem for the cognitive significance of directly referring terms.

Formally, we can perform the extension by simply representing the character of any referring expression *e* as containing a variable element like that located in the character of an EP. Assuming that Kaplan is right that content and character coincide for context insensitive singular terms, the character of *e* will then be represented simply by the expression '*e*[*x*]', where '*x*' is a variable ranging over perspectives. The expression '*e*[*x*]' can be read as '*e* from perspective *x*'. Lois's enquiry into as to the truth of the proposition that Superman/Clark Kent is Superman/Kent is not an expression of her interest in the law of identity, because her interest in fact relates to the character of the sentence 'Clark Kent is Superman', and while this sentence does express that trivial proposition, its character is the non-trivial:

$$(16) \text{ Superman/Clark Kent}[x] = \text{Superman/Clark Kent}[y]$$

The identity of the objects does not necessitate the identity of the perspectives that are values of the variables, and so the characters of the co-referring names contain within them a variable element to acknowledge the fact that speakers who use these terms grasp their referent from given perspectives that need not co-vary with the reference of the terms.

The preceding paragraph, of course, presents nothing more than a formal trick. If we are to have any justification in using it, we will need to find a convincing reason to think that the notion of an egocentric perspective merits extension from the indexical to the non-indexical domain. That is, we need to effectively demonstrate that speakers actually *do* grasp the referent of an expression from an egocentric perspective. But this is not hard to do. Ever since the publication of 'Über Sinn und Bedeutung' well over a century ago, philosophers of language have been keenly aware of this very fact. Some have followed Frege in postulating a level of semantic value distinct from reference for proper

names that carries the burden of cognitive significance. Others, following Russell and Mill, have been suspicious of the idea that names themselves perform any semantic function other than to refer, and have therefore sought an explanation outside of the immediate domain of semantics for how co-referring singular terms can differ in cognitive value. The most influential example of this latter approach is found in Salmon (1986b).

According to Salmon's analysis, propositional attitude ascriptions of the form:

(17) A Vs that p

(where A is the agent who holds a propositional attitude expressed by the attitude verb V to the proposition p) report an existential generalisation of a three-place relation V^* between an agent, a sentence (or other mode of presentation or a proposition), and the proposition expressed by that sentence:

(18) $\exists x(A \text{ grasps } p \text{ by means of } x \ \& \ V^*(A, p, x))$

So, to give one of Salmon's particular examples, belief reports are analysed as existential generalisations of a three-place relation *BEL*:

(19) $A \text{ believes } p \text{ iff } \exists x(A \text{ grasps } p \text{ by means of } x \ \& \ BEL(A, p, x))$

This three-place relation has the following important property:

A may stand in *BEL* to p and some x by means of which A grasps p , without standing in *BEL* to p and all x by means of which A grasps p .

(Salmon, 1986b: 111)

Let us, for purposes of clarity, take the object denoted by the names 'Clark Kent' and 'Superman', to be o_1 . Then, in the notation of structured propositions commonly employed, the proposition that Clark Kent/Superman flies is the ordered sequence:

(20) $\langle o_1, \text{flies} \rangle$

Let, S_1 be the sentence 'Clark Kent flies', and S_2 be the sentence 'Superman flies'. Both S_1 and S_2 express the proposition (20). But Lois may believe (20) by virtue of standing in *BEL* to (20) and S_2 without standing in *BEL* to (20) and S_1 .

This move is designed to explain the Fregean intuition that Lois does not hold contradictory beliefs about Clark Kent/Superman's powers of

flight. The Fregean embeds that intuition in semantic theory by assigning different propositions as objects of Lois's attitudes as reported in utterances of sentences (21) and (22):

(21) Lois does not believe that Clark Kent flies

(22) Lois believes that Superman flies

However Salmon's model has Lois related to the same proposition (20) in each instance, but under a different mode of presentation or guise. This difference in guise does not alter the semantic facts: S_1 and S_2 each mean the same proposition, and so (21) is false. But the difference places a *pragmatic* constraint on propositional attitude reports. Speakers are guided by a requirement to make attitude reports maximally informative, and this is cashed out as a requirement that the appropriate sentence is used to express the proposition agents are reported to hold the relevant attitude to. If Lois expresses her belief in (20) by uttering S_2 , it will be maximally informative to report her belief by uttering (22), not by (23):

(23) Lois believes that Clark Kent flies.

Nonetheless, (23) *is* true. It says that Lois believes (20), which she does. But to report Lois's belief in (20) (as displayed by her utterance of S_2) by uttering (23) is misleading, as it gives the impression that Lois herself uttered S_1 when in fact she did not. The apparent contradiction that arises from our intuitions that (21) and (22) both express truths is to be explained by the pragmatic fact that Lois does not grasp (20) by S_1 , and so (23) *seems* false (and (21) *seems* true) as (23) reports Lois's belief in (20) by a mode of presentation of (20) that Lois herself does not recognize (20) by.

Salmon's proposal is an ingenious attempt to preserve our intuition that names perform one very simple semantic function: that of directly referring to their bearers. Nonetheless, there is no escaping the fact that it demands a departure from our intuitions about cognitive significance. Consider how Salmon's model will explain the puzzle of George IV's interest in the identity of the author of *Waverley*. This is an enquiry as to the truth of the proposition that Scott is Scott. Our reluctance to infer (25) from (24), on Salmon's model, is to be explained by the same pragmatic features just explained:

(24) George IV wishes to know whether Scott is the author of
Waverley

(25) George IV wishes to know whether Scott is Scott

Sentence (25) reports George's attitude in a misleading manner because it employs a mode of presentation of a proposition that George does not recognize the proposition by. But however misleading (25) may be, it is still *true* whenever (24) is according to Salmon's theory. This outcome just seems too hard to square with our intuitions. In a defence of Salmon's model, Soames (1989) acknowledges this difficulty:

This is a serious matter. The best evidence in semantics comes from the settled intuitions of competent speakers. Any semantic theory ought to try to capture as many of these as possible; and no semantic theory can be correct if it leads to widespread conflict with such intuitions. However, these intuitions are not infallible; competent speakers can be wrong about some of the semantic features of their language.

(418)

Of course Soames is right to note that our linguistic intuitions are fallible. But they are not to be tossed aside lightly. Rather they are rejected only when faced with compelling *linguistic* evidence that they are false. Consider, for example, the intuition many speakers have that every NP is a singular term. Russell's theory of descriptions challenges this intuition, but the force of Russell's challenge is regulated by actual linguistic evidence. It would not have been acceptable, for example, for Russell to simply announce that definite descriptions are not singular terms because it had some use elsewhere in his philosophy (say in his treatment of classes as 'logical fictions'), or even because he had an intuition of his own about their meanings. Rather, Russell rejects the intuition that descriptions are singular terms by pointing to actual linguistic evidence, such as the ambiguity of negated sentences containing empty definite descriptions in subject position. This ambiguity can only be explained, according to Russell, by bestowing on definite descriptions sufficient syntactic complexity to facilitate scope interactions with the negation operator that impact on truth-conditions. Such syntactic complexity cannot be had by singular referring terms; hence definite descriptions are not singular terms. Whether the linguistic data Russell appeals to really does provide evidence for his claim is not the issue here: the point is just that rejection of a firm linguistic intuition can only be facilitated by the provision of linguistic data that trumps the

intuition. It is far from clear that such evidence is available to support the rejection of firm intuitions about propositional attitude ascriptions required by Salmon's theory.

The Kaplan/Perry model of cognitive significance is an attempt to preserve our semantic intuitions without diverting them into pragmatic explanations, by locating cognitive significance at an entirely distinct level of semantic representation to the level of content. But the model does not extend to non-indexical cases and, as we have seen, it faces serious problems in accounting for the cognitive significance even of all indexical sentences. The revised version of that theory that employs egocentric characters not only overcomes those problems for indexical semantics but also extends very naturally to non-indexical cases. It extends naturally to all cases of Frege's puzzle and, indeed, all problematic cases of propositional attitude ascriptions, because all of those cases are cases involving the cognitive significance of speakers' or hearers' perspectives on the subject matter concerned.

Finally it is worth noting that though the theory of indexicals and cognitive significance I have developed in this chapter clearly makes dramatic departures from anything Russell himself said, and it employs theoretical resources that were unavailable to him, the basic idea is entirely consistent with a view of language he held throughout his career. Earlier on in his career Russell was wedded to the idea that there is an irreducibly private aspect to meaning as a consequence of his commitment to the principle of acquaintance, coupled with the peculiarities of his epistemology. I have suggested in this chapter that he was wrong to let his epistemology infect his semantics in this fashion. But his later conception of egocentricity is independent of that epistemology. It stems simply from the recognition that speakers occupy perceptual spaces, and the idea that this is reflected linguistically. Indexicals are obvious examples where egocentricity plays a role in their meanings, but Russell was well aware that the phenomenon is more widespread, as he made explicit in a more general reflection on language contained in his reply to Strawson's attack on 'On Denoting':

It is of the essence of a scientific account of the world to reduce to a minimum the egocentric element in an assertion, but success in this attempt is a matter of degree, and is never complete where empirical matter is concerned. This is due to the fact that the meanings of all empirical words depend ultimately upon ostensive definitions,

that ostensive definitions depend upon experience, and that experience is egocentric. We can, however, by means of egocentric words, describe something which is not egocentric; it is this that enables us to use a common language.

(Russell, 1957: 121–122)

Not only does the use of egocentric language to describe what is not egocentric enable us to use a common language; the egocentric presentation of what is not egocentric can also provide and explain the cognitive significance of that common language for its individual speakers and hearers.

7

Russell and the Philosophy of Language

It will be appropriate to begin this final chapter with a quote from Russell:

Philosophers and bookish people generally tend to live a life dominated by words, and even to forget that it is the essential function of words to have a connection of one sort or another with facts, which are in general non-linguistic. Some modern philosophers have gone so far as to say that words should never be confronted with facts but should live in a pure, autonomous world where they are compared only with other words. When you say 'the cat is a carnivorous animal', you do not mean that actual cats eat actual meat, but only that in zoology books the cat is classified among carnivora. These authors tell us that the attempt to confront language with fact is 'metaphysics' and is on this ground to be condemned. This is one of those views that are so absurd that only very learned men could possibly adopt them.

(Russell, 1959: 110)

So wrote Russell at the end of the period of his philosophical activity, when the style of philosophy caricatured in this passage was at the height of its influence. These passages have fostered among Russell scholars the view that Russell had no interest in the philosophy of language. Nor is this lack of interest assumed to be a state that Russell arrived at late in his career. Most Russell commentators would, I think, be in broad agreement with Ray Monk's interpretation of Russell's attitude to the philosophy of language when he writes that: 'throughout all the various transformations of Russell's philosophical doctrines, one

thing remained quite constant, and that was the conviction that, whatever it is the philosopher is concerned with, it is precisely *not* language' (Monk, 1996b: 4).¹

Other commentators who are keen to invoke Russell in support of theses in the philosophy of language are reluctant to be drawn into confrontation over the details of Russell exegesis on the matter. Stephen Neale, for example, carefully separates the historical and philosophical aspects of debates concerning the theory of descriptions, presumably to avoid incurring the wrath of those historians of Russell's philosophy who object to the characterization of Russell as a philosopher of language:² 'Whatever Russell's aims were when he hit upon the Theory of Descriptions, and however much is unearthed about how he was led to it or about its relation to the theory of denoting he had put forward two years earlier in *The Principles of Mathematics*, it is undeniable that the theory's impact later in the century and the principal reasons it is still such a lively and fertile topic of philosophical (rather than historical) debate lie in the philosophy of language' (Neale, 2005: 810–11). The interpretation of the situation that I have been developing in this book, as I will make clear in this concluding chapter, does not divorce the historical from the philosophical debates in this way as I hold that Russell's concerns were in fact much closer to those of the philosophers of language, like Neale, that he inspired than he is given credit for by the received interpretation of his philosophical perspective on language.

Monk goes on to appeal to the non-linguistic nature of Russellian propositions in the *Principles of Mathematics* as further defence of the interpretation of Russell as one for whom linguistic considerations had no philosophical depth. This appeal is frequently encountered in this role. Gideon Makin takes a very similar line when discussing the attitudes of both Russell and Frege towards natural language, writing: 'whatever else Russell and Frege might have been doing, it was clearly *not* their primary interest to offer accounts of the functioning of a natural language. So far [in Makin's book] this claim was implied by the emphasis on the non-linguistic nature of...propositions – which *were* their principal concern' (Makin, 2000: 180). Often quoted in support of the claim that the non-linguistic nature of Russellian propositions excludes Russell from the ranks of the philosophers of language is Russell's comment in the *Principles* that: 'a proposition does not itself contain words...meaning in the sense in which words have meaning is irrelevant to logic' (Russell, 1903a: §51). The inference from the non-linguistic nature of propositions to the conclusion that Russell is not interested in natural language is, however, puzzling. In fact, the

inference is invalid as a simple counterexample shows. In David Kaplan's classic essay on indexical semantics, 'Demonstratives', he explicitly invokes the Russellian non-linguistic conception of a proposition as the conception appropriate for providing the content of properly context-situated indexical sentences. Thus Kaplan agrees (at least with regard to a large class of cases of propositions) with the first clause of Russell's statement above. Yet, Kaplan is quite obviously doing philosophy of language in 'Demonstratives'. Under the influence of both Russell and Kaplan, many contemporary philosophers of language adhere to a distinctly Russellian conception of propositional content. Yet if, as Monk and Makin (to name but two among many) appear to think, this conception of propositional content forbids one from making the functioning of a natural language one's primary interest, these philosophers are not really philosophers of language at all, whatever they believe themselves to be. It is not hard to find contemporary linguists who share the Russell–Kaplan conception for certain regions of natural language.³ Were the inference drawn by Monk and Makin valid, we would arrive at the absurd conclusion that these *linguists* are not primarily interested in the functioning of natural language.

More broadly, we can see that the inference being drawn here is invalid if we generalize the principle away from its emphasis on propositions. Propositions, after all, are *meanings* (of declarative sentences, that-clauses, and so forth). So the argument that because propositions are non-linguistic, an interest in them has nothing to do with an interest in language, is simply a local version of the more general argument that, because meanings are non-linguistic, an interest in them has nothing to do with an interest in language. This is clearly not valid. The fact that I am a non-linguistic thing in no way forbids those direct reference theorists who hold me to be the semantic value of my name from doing so out of an interest in the function of names.

Other evidence has been cited in support of the claim that Russell had no major interest in the philosophy of language. Commonly, one hears it said that Russell was not interested in natural language because, along with Frege, he saw it as inherently defective, standing in need of replacement by a 'logically perfect language' in order for the precise business of philosophical analysis to proceed. Certainly Russell did think that natural languages were logically defective. Their main defect is the fact that they are ambiguous, by virtue of both their syntactic and their lexical properties. A logically perfect language would be unambiguous in both respects: 'In a logically perfect language, there will be one word and no more for every single object, and everything that is

not simple will be expressed by a combination of words...A language of that sort will be completely analytic, and will show at a glance the logical structure of the facts asserted or denied. The language which is set forth in *Principia Mathematica* is intended to be a language of that sort' (Russell, 1918: 197–198). However, as Russell goes on immediately to concede, the formal language of *Principia Mathematica* is not a logically perfect language because it has 'only syntax and no vocabulary whatsoever...it aims at being that sort of a language that, if you add a vocabulary, would be a logically perfect language' (ibid.: 198). A logically perfect language, then, must have semantics as well as syntax. The syntax of PM is unambiguous, but it lacks any non-logical vocabulary.

Russell has identified two respects then in which he takes natural language to be defective – it is syntactically and lexically ambiguous. PM is an improvement over natural language in logical terms when it comes to syntax. Lacking a (non-logical) lexicon, however, it cannot be said to improve on natural language with regard to lexical properties. Of course, even if we agree with Russell that PM is absent of syntactic ambiguity, it does not actually follow that PM is the syntactic superior of any natural language. A well-defined sentential logic contains no syntactic ambiguity, but this would be small consolation to anyone who wished to use it as a replacement for any natural language. There are clearly a large number of syntactical constructions permissible in natural languages that are not available in a sentential logic (e.g. predication, quantification). A logically perfect language should not be radically inferior in its expressive power to a (disambiguated) natural language in this way.⁴ We have already seen in Chapter 4 some reasons for thinking that PM does not have a syntax powerful enough to express every proposition that can be (unambiguously) expressed in English. For example, any English sentence containing the quantifier 'most' cannot be translated into PM in a way that treats 'most' as a quantifier. However, let us ignore this for the moment. If we assume, for the sake of the argument, that Russell *was* in possession of a logically perfect language, would he have had nothing more to say on the nature of natural language?

The answer to this question really depends on what Russell was doing when investigating *logical forms*. Again, it will not suffice to say that Russell thought that logical forms were features of *propositions*, rather than *sentences*, as this does not license the inference to the claim that logical forms have nothing to do with language, for the reasons discussed above. The same can be said in response to the observation that Russell often talks of logical forms as the structures of facts. As facts are regularly expressed by sentences, this does not entail the exclusion of

linguistic considerations from the investigation of logical forms. A concrete example makes this clearer. Russell takes the sentence ‘the present Prime Minister of Britain is male’ to express a fact with the structure:

$$\exists x((\text{Fx} \wedge \forall y(\text{Fy} \supset x = y) \wedge \text{Gx}))$$

But our arrival at this structure is clearly not independent of language. Had we chosen to name, rather than describe, the present Prime Minister of Britain, we would not have expressed a fact with this logical form. So a non-linguistic conception of logical form does not remove interest in natural language.

Russell undoubtedly thought that English is logically defective⁵ because it does not display structural features such as the one above clearly – it treats all NPs alike, and so attributes the form [S [NP] [VP]] to both ‘The Present Prime Minister of England is male’ and ‘David Cameron is male’. A logically perfect language ought to make the structural differences – the differences in logical form – apparent. As these logical forms are genuine features of propositions that appear to be absent from our linguistic expressions of them, Russell drew the conclusion that logical forms are non-linguistic. Two things should be noted here, however: (A) for the reasons outlined above, it does not follow from logical forms being non-linguistic that they are independent of language, or that language is irrelevant to their study. Furthermore, (B) at the time in which Russell was writing, the state of linguistic (and, in particular, syntactic) theory was very different to what it is now. Syntactic theory in 1905 was in much the same state as logical theory in Aristotle’s time, and just as Frege and Russell helped to start a revolution in logical theory, a revolution in syntactic theory occurred later in the twentieth-century. This revolution, inspired primarily by Chomsky, has (as we saw in Chapter 4) resources to explain logical form from a linguistic perspective that were unavailable to, and unimagined by, Russell and his contemporaries. The question we have to ask is whether this new conception of logical form, and the approach to linguistics which utilizes it, is as distant from Russell’s notion of logical form as the surface grammatical structures of English that he dismisses as defective.

I have argued extensively in Chapter 4 that there is no insurmountable obstacle to assimilating Russell’s notion of logical form to something akin to the modern notion of LF. LF structures are unambiguous renditions of linguistic structures. However, this claim must be understood as already invoking a notion of what counts as a linguistic structure that goes beyond any notion Russell had in 1905 or thereabouts.

Indeed this follows immediately from the fact that LF representations are unambiguous, as linguistic structures, given that they are elements of logically imperfect languages, are not guaranteed to be unambiguous for Russell. LFs are by definition (syntactically) unambiguous – if a putative LF could express more than one proposition when containing the same (fully disambiguated) lexical material arranged in the same way within that structure, it would simply be the case that we had not yet succeeded in uncovering the correct LF. For example, Russell takes the sentence ‘the present king of France is not bald’ to be ambiguous between (1) and (2):

(1) [The x : Fx] \sim (Gx)

(2) \sim [The x : Fx](Gx)

A logically perfect language will have a syntax sufficiently fine-grained to disambiguate these two readings of the sentence, as is the case with the RQ expressions employed in (1) and (2). If we understand English as having several layers of syntax, however, with the level of LF being, by definition, the level with sufficient structural resources to fully disambiguate any sentence in preparation for its semantic evaluation, we already have a level of linguistic structure that will deliver equivalents of (1) and (2), namely something like (3) and (4):

(3) [_{NP} [_{DET} the [_N present king of France]]]_e [_s e [_{VP} is not bald]]

(4) [_s not [_{NP} [_{DET} the [_N present king of France]]]_e [_s e [_{VP} is bald]]]

The adverb of negation ‘not’ is thus disambiguated at LF between its occurrence as a modifier of the verb-phrase ‘is bald’ and its occurrence as a modifier of the entire clause, from positive to negative polarity. The LF representation achieves what Russell demands of a logically perfect language (at least with regard to syntax – the disambiguation of the lexicon is a different matter). As Russell takes it to be a distinctive feature of natural language that it is logically imperfect, there is a clearly a notion of what counts as linguistic at play in the concept of an LF structure that was unavailable to Russell.

An obvious response to this is to suggest that Russell, when examining logical forms, was in fact studying the very same phenomenon that contemporary syntactic theorists study under the label ‘LF’ without recognizing it as a linguistic feature. LF representations do a very similar, arguably even identical, job to Russell’s logical forms. But is this similarity enough to warrant the conclusion that Russell was investigating the same phenomenon that we now construe as a linguistic one? The sense

in which LFs are linguistic is a sense that was unimagined by Russell and his contemporaries. It has evolved out of a rich linguistic theory in which language is situated within the cognitive frameworks of its users. LFs are linguistic in the sense that they are believed to be located in an innate 'universal grammar' that facilitates linguistic abilities. There are certainly periods later on in Russell's philosophical career where he would have sympathized with such a view. It does not fit well with the antipsychologistic outlook of his early philosophy, however. Indeed, he explicitly states in the *Principles* that he takes the conflation of propositions and their linguistic expressions to be a confusion that is 'due to the notion that propositions are mental and are to be identified with cognitions' (Russell, 1903a: § 51).

The psychologising of LF structures in modern syntactic theory is not compatible with Russell's early anti-psychologistic notion of logical form. All the same, this does not mean that Russell's logical forms have no connection with language; it simply means that he would (when committed to antipsychologism) have denied the Chomskyan thesis that logical form is part of psychology. The fact remains that logical forms are the structures that disambiguate the (surface) linguistic representations of what we mean. For Russell this involves postulating non-linguistic propositions and attributing to them a structure lacking in language. For Chomsky and his followers, this is done by locating language within psychology (indeed, ultimately, biology) and attributing to linguistic items different levels of structural complexity. But both serve the purposes of providing unambiguous structures. Russell's denial that these structures are linguistic has little bearing on the fact that they are the structures of what we mean when we employ our language. For this reason it is hard to make sense of the claim that Russell's investigations of logical form had nothing to do with natural language. Logical forms are intended to secure unambiguous truth-conditions for sentences. This is as clear a project in the philosophy of language as one could hope to encounter.

The claim that Russell was not embarked on the enterprise of understanding the functioning of natural language, but only of a logically perfect language, sounds convincing as a general claim, supported by many passages in his work. But once we put the claim under closer scrutiny by considering what this means for specific parts of Russell's philosophy, the claim is deeply obscure. For example, what are we to make of the claim as applied to the theory of descriptions? It cannot be that Russell was just not interested in how English sentences containing the word 'the' function. How else are we to measure the theory if not

by its success at capturing the correct truth-conditions for descriptive sentences of real natural languages? Had Russell simply produced the formal language PM, along with its contextual definitions of descriptions – and then shrugged off Strawson's objections on the grounds that English does not in fact behave as the theory of descriptions predicts, only PM does – this clearly would have been to simply concede defeat on every single point raised by Strawson.

How should Russell's many protestations against the modern philosopher's preoccupation with language be interpreted if we are to avoid attributing to Russell either a self-sabotage of his own contributions to the philosophy of language, or a failure to recognize the nature of his own project? The answer is, I think, evident enough from passages like the one cited at the beginning of this chapter. What Russell objected to was the view that philosophy of language turns philosophy into a descriptive enterprise that spells the end for traditional branches of the subject like metaphysics or epistemology. The project that Russell, quite rightly, wanted to distance himself from was the 'ordinary language' movement prevalent in the UK philosophical scene post-Wittgenstein. It is the project, summed up by Wittgenstein's announcement that 'what we do is to bring words back from their metaphysical to their everyday use' (Wittgenstein, 1953: § 116). Indeed, the view ridiculed by Russell in the quotation with which this chapter began is clearly present in passages like the following from Wittgenstein's *Philosophical Investigations*, which may very well be Russell's actual target:

One might think: if philosophy speaks of the use of the word 'philosophy' there must be a second-order philosophy. But it is not so: it is, rather, like the case of orthography, which deals with the word 'orthography' among others without then being second-order.

(ibid.: § 121)

Russell was blunt in his dismissal of the later Wittgenstein's work. In the discussion of Wittgenstein in *My Philosophical Development*, after speaking of the earlier Wittgenstein's criticisms of his position (i.e. those voiced in the *Tractatus*) as 'deserving of all respect', he says simply: 'his later doctrines, as they appear in his *Philosophical Investigations*, have not influenced me at all' (Russell, 1959: 83). Certainly there are valuable insights in the *Investigations*, and it is perhaps unfortunate that Russell refused to engage at all with the work. All the same, if the passage just quoted were representative of the work as a whole (and I think it would

be extremely unfair on Wittgenstein to claim that it is), it would be hard not to sympathize with Russell's dismissal of it. One would hope that philosophers interested in the *use* of the word 'philosophy' would be interested, not in the *word* itself, but what it *means* – i.e. what philosophy *is*. But this entirely destroys the analogy Wittgenstein wants to draw with orthography which is *only* interested in the word and not at all interested in its meaning (hence ensuring that the orthographical analysis of the word 'orthography' is unaffected by any apparent semantic reflexivity). One does not need to know what 'orthography' means in order to spell it correctly.

Even if there is a more charitable reading of what Wittgenstein is trying to convey in this cryptic passage, or, for that matter, even if we focus on some of the more sophisticated and insightful remarks in the *Investigations*, it would obviously be wrong to identify the philosophy of language with any movement originating in Wittgenstein's attitude towards the relation between philosophy and language. Ordinary language philosophy has had its day. Very few philosophers of language now would disagree with Russell's assessment of what most now construe as an outdated, and rather eccentric, relic of mid-twentieth century British philosophy. A central project in philosophy of language over the last few decades, namely the attempt to systematically specify the semantics of large regions of natural language, is fundamentally opposed to Wittgenstein's anti-theoretical stance. That stance was echoed in Strawson's closing remark in 'On Referring' that 'ordinary language has no exact logic' (Strawson, 1950: 159). Russell speaks for every natural language semanticist when he refuses to accept this.

Monk's interpretation of Russell as a philosopher without any significant interest in the philosophy of language is offered in response to Michael Dummett's thesis that analytic philosophy is defined by the priority it gives to the philosophy of language. Russell is presented by Monk as the counter-example that defeats Dummett's suggested definition, for, quite correctly, Monk takes it to be a necessary condition of any definition of analytical philosophy that it accommodate Russell as an analytical philosopher. As Monk recognizes, his claim (quoted above) that Russell was never primarily interested in the philosophy of language cannot rely solely on Russell's 1903 claims regarding the irrelevance of meaning to logic. For by 1919, Russell was publicly voicing a quite different view.⁶ This change of heart was explained by Russell later on as follows: 'The problem of meaning is one which seems to me to have been unduly neglected by logicians; it was this problem which first led me, about twenty

years ago, to abandon the anti-psychological opinions in which I had previously believed' (Russell, 1938: 362). Two years later Russell published *An Inquiry into Meaning and Truth*, a book devoted primarily to addressing the problem of meaning. Even here, however, Monk refuses to see any evidence that Russell is embarked on any project that might count as philosophy of language. 'The problem of meaning', Monk tells us, 'insofar as it was an interesting question, was for Russell essentially a psychological problem' (Monk, 1996b: 8). This, Monk notes, is a fundamentally different attitude towards language than the one which Dummett approvingly attributes to Frege, in the form of the so-called linguistic priority thesis – the thesis that language is prior to thought in the order of explanation. However, a subtle shift in focus has occurred in Monk's argument here. His original objection to Dummett, it will be recalled, was that according to Russell: 'whatever it is the philosopher is concerned with, it is precisely *not* language' (ibid.: 4). This is Monk's reason for insisting that 'Russell never thought that the philosophy of language was the foundation of all other philosophy' (ibid.). But the work, apparently *on* the philosophy of language, in *An Inquiry into Meaning and Truth* is not evidence in support of this claim; it is evidence that Russell did not agree with Dummett's independent claim that philosophy of language must be an anti-psychologistic enterprise. There is no reason why we cannot agree with Monk's reasoning when it comes to denying that Russell adhered to the linguistic priority thesis, while simultaneously maintaining that Russell was a philosopher of language. In *An Inquiry into Meaning and Truth*, he takes a psychologistic approach to the philosophy of language – an approach that has subsequently been endorsed by many other philosophers of language – and *seems* to make the inquiry into the nature of language so construed foundational to all other philosophy. The opening lines of the book certainly encourage its readers to see it that way: 'The present work is intended as an investigation of certain problems concerning empirical knowledge. As opposed to traditional theory of knowledge, the method adopted differs chiefly in the importance attached to linguistic considerations' (Russell, 1940: 11). The book examines natural language in great detail, including (as we have seen in Chapter 6) detailed analyses of linguistic expressions such as indexicals, which are of central concern to natural language semanticists and yet were scarcely studied by philosophers before the book was published. To deny that this is a work in the philosophy of language strikes me as deeply uncharitable to its author's intentions and achievements.

It is notable that Russell again places a great deal of weight on the role of propositions in the theory developed in the *Inquiry*. The fact that these propositions are understood as psychological elements in the theory is appealed to by Monk in defence of his denial that Russell was concerned with linguistic matters. The argument directly parallels Monk's earlier appeal to the non-linguistic nature of propositions in 1903. The inference regarding the Russell of 1940 is no more valid than that regarding the Russell of 1903. Propositions, in both cases, are what certain combinations of words mean. They play an important theoretical role in connecting language and thought to the world. They furnish declarative sentences with unambiguous truth-conditions. Whether one explains these features of propositions by appeal to abstract objects, images in our heads, or anything else, they are features that are primarily concerns in the philosophy of language.

In his 1900 book on Leibniz, Russell wrote: 'That all sound philosophy should begin with an analysis of propositions, is a truth too evident, perhaps, to demand proof' (Russell, 1900: §7). The analysis of propositions looks very much like, to recall Monk's phrase, 'the foundation of all other philosophy' here. Approaching the end of his philosophical career, in *An Inquiry into Meaning and Truth* and *Human Knowledge*, it is still the analysis of propositions that forms the foundation of Russell's philosophical enterprise. The conception of propositions Russell arrived at in the 1940s is very far removed from the one he advocated in 1900. They do, however, have something crucially important in common: neither conception reduces propositions to language. But this is no ground for holding that their study is no business of the philosopher of language. The study of propositions is the study of the meanings of the most fundamental constructions of our language. Thus it is not just part of the philosophy of language, but the core of it. Insofar as one makes the analysis of propositions the foundation of all other philosophy, one thereby makes the philosophy of language the foundation of all other philosophy.

Notes

Introduction

1. Landini is specifically talking about Russell's extension of the theory of descriptions to a descriptive theory of names here, although this insistence that the two doctrines are inseparable makes it clear that his view applies to the theory of descriptions itself. In Chapter 1, I reject the claim that the theory of descriptions has any essential tie to the descriptive theory of names.
2. Prior to writing this book, I was one of them.

Chapter 1

1. For Russell the main additional role of the theory is that of generating so-called logical constructions, which at various times included classes, propositions, and numerous apparent inhabitants of the physical world. I will return to this in chapter three.
2. The most important of these predecessors, Frege, agrees with Russell about only some of the phrases in question and, in his (1879), he provides the first detailed analysis of them as non-singular. Frege's insistence that definite descriptions are singular terms, however, is one of the main targets of 'On Denoting'.
3. Indexical singular terms, obviously, can refer to several objects but only one in a given context.
4. Russell's habit of dispensing with a quotational device for distinguishing use and mention, as is illustrated in this passage, leads to frequent problems in deciphering the details of his thinking, as we shall often see in this book. It is pretty harmless in the above passage, however.
5. Neale's (1990) defence of the theory of descriptions is intended to establish as much, as is evidenced by his claim that 'it is at least arguable that every natural language noun phrase is either a quantifier or a referring expression' (ibid.: 6).
6. There is some dispute among linguists as to whether the noun or the determiner is the head of a determiner phrase. See Neale (2005: 813) for discussion.
7. I will not discuss anaphora in significant detail in this book. Interested readers are directed to Neale's superb treatment in his (1990). I will discuss indexicality in detail in Chapter 6.
8. I address this concern more fully in the next chapter.
9. See my (2008a) for discussion of this point.
10. Unfortunately the independence of the theory of descriptions from the description theory of names is not always appreciated by Russell's commentators. Landini (2011) is the latest to fall into this trap. Having conceded that 'The theory [of descriptions] does require that we replace proper names

by definite descriptions in the quest to render truth-conditions quantificationally' (ibid.: 194), he responds to Kripke's objections to descriptivism by denying that Russell was offering either an account of communication or of reference. Rather, he insists 'Russell's theory of definite descriptions is a quest to give careful truth-conditions that get the ontology right – minimizing, wherever possible, speculative philosophy' (ibid.). Quite apart from the fact that there are numerous cases that directly contradict Landini's claim that the theory does not provide any account of communication or reference (for example, in the discussions of propositional attitudes in 'On Denoting'), Landini's account never explains how the quest for careful truth-conditions avoids Kripke's objections. Kripke shows that the truth-conditions of sentences containing singular terms in subject position cannot be reduced to the truth-conditions of any descriptive sentences. This does not seem to be appreciated by Landini, who proceeds to approvingly reiterate Russell's descriptive analysis of 'Pegasus exists' as having the logical form ' $(\exists x)(\forall y)(Ay \equiv y = x)$ ' where all that we are told about 'A' is that it is arrived at if 'we replace the ordinary proper name "Pegasus" for a definite description involving A' (ibid.: 199). But this is just what, if Kripke is right, we cannot do, for there is not, in general, a definite description that has the same truth-conditional profile as any given proper name. All of these problems can be bypassed by a defence of the theory of descriptions once we recognize that the theory has no essential tie to Russell's description theory of names.

11. See Russell (1914c).
12. Kaplan's semantics for indexicals will be covered in detail in Chapter 6.
13. Russell does argue in a similar fashion for a direct reference theory of demonstratives (at least, the ones he classes as 'logically proper names'), though the argument is never purged of the epistemological trappings of Russell's principle of acquaintance (see e.g. Russell, 1914a: 167–168). We will return to this topic in chapters five and six.
14. See Nunberg (2004) for a useful overview. The same phenomenon is sometimes termed 'transferral'. See Recanati (2004a) for discussion. Borg (2002) focuses particularly on the phenomenon as it occurs in demonstrative reference.
15. Braun (1993 and 2005) develops a Russellian framework for resolving these difficulties.
16. These arguments will be assessed in chapter four.
17. ' $\exists_1 x (\dots x)$ ' should not be confused with Russell's ' $(\exists x)(\dots x)$ '. Propositions containing ' $(\exists x)(\dots x)$ ' are defined in Whitehead & Russell (1925: *14.01). The difference between ' $(\exists x)(\dots x)$ ' and ' $\exists_1 x (\dots x)$ ' should be clear to see: if we fill in the gap in ' $\exists_1 x (\dots x)$ ', we will obtain a closed sentence; if we fill in the gap in ' $(\exists x)(\dots x)$ ', we will have an NP.
18. See Neale (1990: 120) for similar examples involving monotone decreasing quantifiers.
19. Or, at least, this would be so long as one takes singular terms to be *Russellian* – i.e. to always refer. Another possibility here might be to endorse a negative free logic, and appeal to the possibility of reference failure for singular terms to justify the scope-marking notation: ' $\sim Fa$ ' is ambiguous, on this construal between the proposition that the existing entity *a* lacks the property *F*, and the proposition that there is no entity *a* (and so it is not *F*).

Note that this will only help to provide scope readings for a limited number of cases, namely those where an existence assumption is relevant. This issue will be returned to in chapter four.

20. Russell has a tendency to slur the distinction between symbols and their purported referents in many of his discussions of incomplete symbols. The phrases 'incomplete symbol' and 'symbolic convenience' are most naturally taken to refer to symbols (e.g. denoting phrases, class abstracts, sentences, open sentences, etc.), while the term 'logical construction' suggests reference to an item these symbols appear to (but don't really) refer to (e.g. described objects, classes, propositions, properties, etc.). Russell, unfortunately, does not consistently employ such sensible usage.
21. See Alasdair Urquhart's illuminating introduction to the manuscript in Russell (1994: 283) for details of the exact time it was written.
22. The foremost proponent of this view in linguistics, of course, was Richard Montague.
23. I say *standardly* because it is obvious that Strawson should be allowed to retract the condition for non-standard uses, e.g. figurative speech, etc.
24. It is unclear in Strawson (1950) whether he thinks that in such cases a proposition that lacks a truth-value is uttered, or whether no proposition is uttered.
25. It is worth noting, while on the subject of the semantics/pragmatics interface, however, that Strawson's provocative remark at the end of 'On Referring' that 'ordinary language has no exact logic' (Strawson, 1950: 159) does not follow from any of the positive proposals he makes in the paper, which are quite compatible with a systematic approach to natural language. For example, Barwise and Cooper's seminal (1981) work on natural language quantification encodes the notion of a presupposition directly into the semantic values of definite descriptions (see next chapter for further discussion).
26. See Neale (2004).

Chapter 2

1. It is explicitly invoked in the service of this project by Wittgenstein (1922, § 4.0031).
2. Russell wrote a phenomenal amount on denoting during this period. The manuscripts are now published in volume four of the *Collected Papers of Bertrand Russell*. See Monk (1996a) for a biographical account of the period.
3. See, in particular, Quine (1966) for the Meinongian interpretation of the *Principles*. In my (2005) I argue that Quine (1953b, 1966, and 1967) also misunderstands the ontology of *Principia's* theory of types.
4. I do not claim that Meinong was a Meinongian according to my usage.
5. As Salmon (2005, p. 1072, ft. nt. 9) points out, the omission of the determiner 'no' in Russell (1903a), rectified in Russell (1905c), appears to be nothing more than an oversight.
6. See the opening paragraph of Russell 1903a § 56 for an explicit statement of the non-linguistic nature of the *denoting* relation.

7. See the final paragraph of *ibid.*, § 64.
8. Though never explicitly stated in the *Principles*, the assumption is clearly present in, for example, Russell's assumption that an explanation is demanded of how we can understand propositions concerning the infinite, despite our inability to grasp infinitely complex concepts (Russell, 1903a, § 72). Explicit statements of the principle first start to appear in Russell's manuscripts from 1903 onwards. For example, in the manuscript 'Points About Denoting': 'It is necessary, for the understanding of a proposition, to have acquaintance with the meaning of every constituent of the meaning, and of the whole' (Russell, 1903c, p. 307; see also Russell, 1903d, pp. 315–316). It seems likely that Russell only began to scrutinize the assumption in detail at this time for two reasons: (1) such epistemological matters were just taken for granted, not subjected to critical reflection by him in the *Principles*; (2) he began to experiment with different modifications of the principles following his study of Frege, as can be seen by the (admittedly sloppy) formulation of the principle as applied to meanings here.
9. To be more precise, taking names to be disguised descriptions will free Russell of those burdensome ontological commitments just as successfully when conjoined with the 1903 theory as it did when conjoined with the 1905 theory. Whether either account is ultimately considered correct will depend on how feasible one thinks the description theory of names is. Most people working in the area hold the theory to have been refuted by Kripke (1980). Whether this judgement is correct or not I will not comment on here; the only point I wish to make is that the description theory of names will be in precisely the same boat on this score, whatever one's preferred theory of descriptions. Thus these issues have no bearing on the choice between Russell's 1903 or 1905 theories.
10. Indeed, one proponent of nominal-Meinongianism, Boukema (2005, 2010), is clearly aware of this point and sensitive to it, going to great lengths to find internal evidence in 'On Denoting' and other manuscripts from the same period to support his interpretation in a way that explains, rather than relies on, Russell's unpredictable autobiographical memories.
11. For a careful study of the influence of Frege over Russell during this period, see Klement (2003).
12. I disagree, therefore, with Candlish (2007, pp. 112–113) when he suggests that, although the theory of descriptions was not required to rid Russell of Meinongian entities, it still made a dramatic improvement by ridding his ontology of denoting concepts themselves. In my view there is no real improvement on this issue, as, by Russell's insistence in 'On Denoting' that all constituents of propositions that we can understand are entities with which we are directly acquainted, we are still acquainted with the (uninstantiated) property of *present-king-of-Franceness* according to the theory of descriptions. Of course, the lessons that the 1905 theory teach us about logical form are supremely important, but *ontologically*, I see no advantage to endorsing the existence of this property over endorsing the existence of the denoting concept /the present king of France/. Russell may of course reply that the analysis of 'the present king of France is bald' offered here is only a preliminary one and that a complete analysis would reveal a more complex proposition in which the apparent property of *present-king-of-Franceness* is

analysed into whatever things one must ultimately be acquainted with in order to understand the sentence. But then, similar objections are likely to stand against whatever properties are thrown up by *that* analysis if and when it arrives.

13. The case where such an aberration seems most obviously to occur is in Russell's discussion of the distinction between things and concepts. Listed as *things* (i.e. things which can only occur as logical subjects) are 'the points in a non-Euclidean space and the pseudo-existents of a novel' (Russell, 1903a, § 48).
14. The final clause of this passage is puzzling, given Russell's commitment to bivalence in the *Principles*. If p is such a proposition that is false by this definition, $\sim p$ should be true, but this contradicts the clause if taken literally. Given what Russell goes on to say in this passage (quoted shortly), it seems likely that he means something more restricted, such as that a sentence of the form ' x is an F ' is false for all values of x when the denoting concept /an F / is empty.
15. In fact Russell seems to treat the concept *chimaera* as a denoting concept in § 73, so we should probably interpret the term as being coupled with an implicit determiner, the most likely candidate being 'all', as the proposition he considers (that chimaeras are animals), he goes on to analyze as a universal generalization.
16. Expressed in the notation for quantifiers employed in Russell (1903a): ' x is a chimaera $\supset_x x$ is an animal'.
17. It is, of course, entirely possible that the truth of the matter here is that Russell simply *was* either confused, inconsistent, or both when he wrote the *Principles*. A plausible explanation for the disparity in the two positions apparently presented in §§ 73 and 427 respectively may be that Russell was fluctuating between a perceived commitment to the being of Meinongian entities and an occasional awareness of how to avoid such commitment. As I stated at the beginning of this chapter, my intention has been to show that Russell was not committed to Meinongianism, *whether he realized it at the time or not*.
18. More precisely, the view expressed by Levine's principle (Ab*): 'A sentence of the form " $The F$ is G " is about an entity denoted by the phrase of the form " $the F$ " and is making an assertion expressed by the phrase of the form " $is G$ " of that entity' (Levine, 2005: 12).
19. Barwise and Cooper, 1981, brought the device to the attention of linguists, though it was utilized in mathematical logic before, and can be understood as an extension of the work of Montague (1970, 1974).
20. See Cooper (1983).
21. See, e.g. the discussion of the ontological argument in Russell 1905c: 54.
22. Barwise and Cooper (1981: 166) take a more Strawsonian line on empty definite descriptions, construing all sentences containing empty definite descriptions as meaningless. This follows from their decision to interpret the semantic value of 'the' as a function with domain the set of all singletons. This, as they note, is in line with 'presuppositional' treatments: uses of 'the F ' are understood as making sense only against the background assumption that there is a unique F . Russellians, obviously, ought to reject this claim and thus widen the domain of /the/. A more Russellian analysis

will construe /the/ as a function with its domain being the set of all sets, but which maps every set that does not have exactly one member to \emptyset . Barwise and Cooper are probably objecting to just such a move when they insist that ‘any attempt to assign [an empty definite description] an *ad hoc* denotation is bound to give rise to some incorrect inferences’ (ibid.). They are no doubt correct, but it is equally correct that the presuppositional analysis results in incorrect inferences (see Neale, 1990: ch. 3 for some good examples). The clash of intuitions between Russellians and their opponents on this issue is not one that will be resolved by the theory of generalized quantifiers; rather, the details of the theory must conform to the intuitions of whoever utilizes it.

Chapter 3

1. Although I have modernized Whitehead and Russell’s notation, I have retained two components of the original notation: the shriek ‘!’ which signifies that ϕ is a predicative function, and the circumflex ‘^’ which caps the variable in an open formula to form a singular term standing for a propositional function.
2. I will be brief in my description of the theory here. A fuller account can be found in my 2005, Chs 2–3. See also my 2009. The book that was responsible for bringing the full importance of Russell’s substitutional theory to the attention of Russell scholars, and by far the most complete study of the theory, is Landini’s (1998), a summary of which is given in my (2003a).
3. See Russell (1906b: 168).
4. See Russell (1906b: 170–72).
5. See Russell (1908: 77).
6. See my 2003b, 2004a, 2005, 2006, and 2008 for more.
7. A vast amount of ink has been spent on trying to decipher the GEA. Much of it has been concerned with whether the argument is intended as an attack on Frege’s theory of sense and reference, Russell’s 1903 theory of denoting, or both, as well as with the question of how successful it is with regard to some or all of these alleged intentions. For a varied selection from the many published takes on the argument, see Blackburn and Code (1978), Cassin (1970), Demopolous (1999), Geach (1959), Hochberg (1976), Kremer (1994), Levine (2004), Pakaluk (1993), Searle (1958), Wahl (1993), Hylton (1990), Salmon (2005), Rebera (2009), Noonan (1996), Makin (2000).
8. Note that some, like Cassin (1970: 262), object to Church’s assumption here that the GEA is directed at Frege rather than against the theory of denoting concepts contained in the *Principles*.
9. Makin (2000) agrees – this is where we go from the ‘symbolic’ to the ‘substantial’ round of the argument as he interprets it.
10. Of course it is only elegant and simple in some senses – from the point of view of one concerned to represent the syntax of English, for example, it often seems inelegant and *ad hoc*. Whether or not this is a serious problem depends on the extent to which the theory has an essential tie to the formal language of *Principia*, as we shall see in the next chapter.

Chapter 4

1. Very few people have detracted from the orthodox view. One notable detractor is Green (2007). Another is Hager (2003), writing in the same volume as the paper from Tully cited above. That I failed to appreciate this in my (2004b) review of that volume shows the extent to which I shared the orthodox view at the time.
2. See, e.g., the appendix to Neale 2001.
3. See e.g. Montague (1974) and Barwise and Cooper (1981). Linsky (forthcoming) provides a detailed history of the development of the idea.
4. Sainsbury (2004) reiterates Evans's argument to make the same point.
5. It should be noted that the terms 'surface structure', 'deep structure', 'phonetic form', and 'logical form' carry connotations that are not intended by Chomsky. For this reason, it is now common to replace the first two by the more neutral 'S-structure' and 'D-structure'. LF representations (LFs for short) differ quite radically from logical forms as traditionally conceived by philosophers, most notably because they are to be uncovered empirically. See Chomsky (1981: 17).
6. Hungarian, for example, makes some scope relations between quantifiers explicit in SS. See Cook & Newson (2007: 179).
7. It should also be noted that this claim is made some time after Russell had ceased to identify facts with true propositions, so the logical forms of facts that Russell alludes to here cannot be the logical forms of propositions in his view.
8. See also Linsky (2002), Gandon (2006), Evans (1977, 1982).
9. See e.g. Russell 1940, 1948.
10. The definitions are restricted to a given domain U . I am using the expression ' $v(e)$ ', to denote an expression e 's semantic value.
11. Of course, the interdefinability of the universal and existential quantifiers with negation means that the universal quantifier could be replaced by an existential one. For the sake of argument, I here assume that the universal quantifier is primitive, with the existential quantifier introduced as a defined sign. The same remarks will apply to the existential quantifier if we take that as primitive instead.
12. Collins 2007.
13. Collins devotes the second half of his paper to further objections to the specific appeals made to syntax by Jason Stanley to support his highly controversial thesis that 'all truth-conditional effects of extra-linguistic context can be traced to logical form' (Stanley, 2000: 391). As the tenability of Stanley's thesis has no bearing on the project of this book, I will not consider these objections here.
14. As Collins (2007: 825) notes, a further function is semantic in a wider sense, namely the task of sorting out what is semantically significant from what is (only) morphologically significant. This function generates structures that do not appear to fit with the structural expectations we have of propositional content.
15. Or binary quantifiers, although this is slightly more complicated. See Neale (1990).

Chapter 5

1. The term 'complex demonstrative' is potentially misleading here. As we will see in what follows, phrases of the form 'that F' are philosophically puzzling partly due to their apparent occurrences in situations where they do not function *demonstratively*. King (2001) is particularly interested in these cases. He often prefers the term 'that-phrase' to 'complex demonstrative'. However, as the latter term is fairly uniformly employed in the literature to denote all phrases of the form 'that F' (King's book itself is called *Complex Demonstratives*), I will conform to this practice here.
2. Where $\langle s, c \rangle$ represents the ordered pair of the sentence s and a context c in which it is uttered.
3. One might think that the force of this objection can be diverted by pointing to other common cases where words may be uttered without semantic significance. For example, in English as widely spoken, double-negatives, insertion of 'like', 'so', etc., where these elements have a purely pleonastic function are some such cases. The difference here, however, is that we have good explanations from pragmatics, or from empirical studies of regional dialects, etc., of why these phonetic elements are not present in the mappings of SSs to LFs and so do not survive the transition from surface syntax to semantic evaluation. No equivalent explanation seems to be available for complex demonstratives.
4. See Grice (1975) and Kripke (1979). See also comments on pragmatics in Neale (2004).
5. It might be thought that a pragmatic story could see a process of loosening at work here. The predicate 'fox' is perhaps loosened to express the *ad hoc* concept fox^* which includes badgers on dark nights in its extension. Perhaps there is some mileage in this line of explanation. Note, however, that this presupposes that a semantic contribution is made by the (loosened) descriptive material, thus lending support to the quantificational analysis.
6. The notion of monotone direction is imported into semantics from arithmetic, where a function f is monotone increasing if and only if for any x, y if $x > y$ then $f(x) > f(y)$; f is monotone decreasing if and only if for any x, y if $x < y$ then $f(x) < f(y)$.
7. A name ' n ' of an individual n can be assigned the generalized quantifier $\{X \subseteq U: n \in X\}$, i.e., the set of subsets of a domain U that contain n .
8. Salmon (2008) takes that fact that the complex demonstrative in (10) does not refer to a particular day to show that it is not being used as a complex demonstrative, as it is not functioning as indexical at all. This attempt to deflect King's objection appears to fall victim to the terminological confusion highlighted in footnote 1 above: it begs the question against King to take it as definitional of a 'real' complex demonstrative that it be a demonstrative indexical, for this is precisely what King denies.
9. Salmon (2008) suggests that some of these cases may be cases where 'that' functions as 'a definite-description operator together with a narrow-scope indicator' (267, ft. nt. 9). But, again, this does not seem to be a convincing way to divert King's challenge, as it raises as many problems, if not more, than it avoids. For example: what mechanism converts a complex demonstrative into a definite description with a built-in scope indicator? Under

what circumstances does it do so? And what makes these cases semantically secondary to the indexical uses, so as to guarantee that the correct semantics for complex demonstratives is as specified by the orthodox view?

10. For King's own responses see King (2008a). Braun continues the debate with King in Braun (2008b).
11. As well as his arguments in King (2007), discussed in the last chapter, that LFs provide propositional structure.
12. See Neale (2004) for discussions of aponicity and incomplete definite descriptions.
13. Lepore and Ludwig actually present the objection originally as one against quantificational accounts of simple, demonstrative 'that'. However, the discussion that follows makes it plain that they also intend it to apply to quantificational accounts of complex demonstratives.
14. As noted by Lepore and Ludwig (2000: 209), these include sentences with occurrences of vague expressions elsewhere, and so on.
15. See Sperber and Wilson (1986).
16. As shown by Barwise and Cooper. See above.

Chapter 6

1. In earlier work, e.g. Russell (1913: 40–41), Russell uses the term 'emphatic particular'.
2. As there are frequent variations in the use of terminology in the literature on indexicality, it will be helpful to clarify my terminology at the outset of the chapter: *deixis* is the general phenomenon of truth-conditionally significant context-sensitivity, *indexicality* is the phenomenon of linguistically mandated referential context-sensitivity, *pure indexicals* are expressions possessing the kind of indexicality that requires no demonstration or intention to secure reference, and *demonstratives* are non-pure indexicals.
3. At least not according to Kaplan (1989a), who maintains that tenses are operators on 'temporal propositions' – propositions whose truth-value is sensitive to the time of evaluation. This point is discussed in detail below.
4. Or, perhaps, not so straightforward: 'the present' is, according to Russell's theory of descriptions, a non-referring expression. However, as we shall see, Russell is in fact convinced that all EPs are reducible to the demonstrative expression 'this' (which he maintains is a directly referential expression or, in his terminology, 'logically proper name'), and so we can safely assume that he holds all EPs to be ultimately reducible to referring expressions.
5. Russell and Reichenbach each note that they read the other's work in manuscript form. See Russell (1940: 115) and Reichenbach (1947: 284).
6. Subsequent developments in linguistics appear to favour the Russell–Reichenbach view here over Kaplan's alternative view. Kaplan takes tenses to be operators. Thus sentences can express temporally neutral propositions which are then to be evaluated at circumstances of evaluation which contain a temporal parameter. It is for this reason that Kaplan's circumstances are world-time pairs rather than simply worlds. Contemporary linguistic research has largely (though not universally) rejected this approach as a distortion of the semantics of tensed sentences in natural language (see Partee,

1973 for compelling arguments against the operator view). The preferred approach now in formal semantics is to posit an element in the LF of a tensed sentence which either refers directly to a specific moment in time or quantifies over moments. The propositions expressed by tensed sentences on this analysis are never temporally neutral. See King (2003) for arguments specifically directed at Kaplan's theory from this angle. Recanati (2007) defends the Kaplanian operator view against King's objections.

7. See e.g. Russell, 1913, 1914a, 1918.
8. More correctly, world-time pairs for the reasons explained in footnote 6 above. As most people choose not to follow Kaplan in insisting on a temporal parameter in the circumstance of evaluation, and because it has no real bearing on the current discussion, I omit it to simplify things here.
9. Russell takes a different line on the first-person singular pronoun, arguing that it is in fact a disguised description. However, it should be noted that Russell's reasons for doing so do not suggest a conflation of character and content. Rather the culprit is Russell's principle of acquaintance, coupled with his belief that we have no acquaintance with the self, from which: '[i]t follows that the word "I", as commonly employed, must stand for a description; it cannot be a true proper name in the logical sense, since true proper names can only be conferred on objects with which we are acquainted' (Russell, 1914a: 164). Green mistakenly states that this position is 'quite different from that which he had argued in the 1913 *Theory of Knowledge*' (Green, 2007: 48). On the contrary, the position is exactly the same. In fact 'On the Nature of Acquaintance' is an excerpt from the 1913 *Theory of Knowledge* manuscript (the latter was left unfinished and was not published until after Russell's death), and the passage in question is taken, unaltered, from the manuscript (see Russell, 1913: 36–37; the passage from Russell, 1914a: 168 is also taken, unaltered, from Russell, 1913: 139).
10. For further discussion of this phenomenon, see Pelczar and Rainsbury (1998).
11. Consider also self-reflexive uses of 'this' in sentences and utterances, like the utterance of 'this is a journey into sound' that has been sampled in numerous contemporary music tracks, or the liar sentence 'this sentence is false'. No demonstration is needed to fix the referent of 'this' in either case.
12. Although *Demonstratives* and 'Afterthoughts' were published together in 1989 each for the first time, *Demonstratives* had been written and widely circulated in mimeographed form for more than ten years previously.
13. See Hacker (1986: 235).
14. For an extensive discussion of the relation between circumstances and truth-conditions and an argument for incorporating circumstance-relativity into a formal semantic theory, see Predelli (2005) (it should be noted that the position taken regarding the semantics/pragmatics interface by Predelli is very different to Recanati's).
15. See also Barwise and Perry's seminal (1999) work on situation semantics for a development of similar ideas.
16. I mean by 'fully' wide scope, that both quantifiers are given wide scope. There is an intermediate position where only one quantifier is given wide scope, as well as the *de dicto* reading on which both quantifiers have narrow scope.

Chapter 7

1. The only person to directly challenge this interpretation in detail that I know of is Green (2007). See my (2008b) for discussion of Green's interpretation.
2. That it is the insistence of Russell commentators that Russell was not interested in linguistic issues that motivates Neale's qualification in the following passage is evident from the footnote he attaches to it (see Neale, 2005: 811, ft. nt. 9).
3. Most notably, for indexicals, where Kaplan's version of Russellianism largely holds sway.
4. Although some inferiority in expressive power may be desirable – for example one might hope that a logically perfect language would restrict the range of its truth-predicate to a greater extent than is the case in natural language, so as to avoid semantic paradoxes (depending of course on one's philosophical perspective on such matters).
5. Note that Russell does not take logical deficiency to be wholly undesirable. According to him 'It would be altogether incredibly inconvenient to have an unambiguous language, and therefore we have not got one'(1918: 196). Russell's reasoning here relies on his epistemology: we all mean different things by our words, because the meanings we attach to them rely on acquaintance. As what we are acquainted with are our own sense-data, this guarantees that an unambiguous language would be a private language.
6. See e.g. Russell, 1919 and 1921. See my 2006 for discussion.

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